

GROUNDWATER MONITORING
DATA SUMMARY REPORT
FOURTH QUARTER 1996

DOUGLAS AIRCRAFT COMPANY
C-6 FACILITY
TORRANCE, CALIFORNIA

K/J 944016.02

Kennedy/Jenks Consultants

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1.0 INTRODUCTION

The Douglas Aircraft Company (DAC) C-6 Facility is located at 19503 South Normandie Avenue, Torrance, California (Figure 1). Quarterly groundwater sampling is being conducted in response to the California Regional Water Quality Control Board - Los Angeles Region correspondence to DAC, dated 7 April 1992. This report summarizes laboratory analytical data generated through the chemical analysis of groundwater samples collected 17, 18, and 19 December, Fourth Quarter 1996.

2.0 QUARTERLY MONITORING PROGRAM

Fourth Quarter 1996 groundwater sampling was performed in accordance with standard sampling procedures. Static water level depths were measured on 17 December 1996 prior to initiating purging of groundwater from any observation well. Static water depths in monitoring wells (MW-8, MW-9, MW-18 and MW-19) located in the southern portion of the DAC property installed for the Montrose Chemical Corporation Remedial Investigation were not measured for this quarter. Well WCC-10S was either covered or destroyed as the result of demolition activities on site, and was not measured or sampled.

Groundwater samples were collected from the following fifteen wells (Figure 2) and chemically analyzed for volatile organic compounds (VOCs) by EPA Method 8240/8260 for the Fourth Quarter 1996.

WCC-1S, WCC-2S, WCC-3S, WCC-4S, WCC-5S, WCC-6S, WCC-7S, WCC-8S, WCC-9S, WCC-11S, WCC-12S, WCC-1D, WCC-3D, and DAC-P1.

Table 1 summarizes observation well construction details. Tables 2 and 3 summarize the results of chemical analysis of groundwater samples and duplicates for major and minor constituents at the C-6 facility, respectively. Chemicals detected in samples from each observation well are shown in Figure 3. Table 4 summarizes available measured groundwater elevations to date. Estimated groundwater elevation contours for the Third Quarter are presented in Figure 4. Historical chemical concentration profiles for the indicator chemicals trichloroethene and 1,1-dichloroethene are shown in Figure 5. Copies of laboratory data sheets, laboratory/field Quality Control data sheets, groundwater purge and sample forms, and Chain-of-Custody records are included in Appendices A, B, C, and D respectively.

2.1 Groundwater Sampling Procedures

Prior to collecting groundwater samples from each well, groundwater was purged using an electrical submersible pump that was temporarily installed in the observation well. After lowering the pump to the approximate mid-point of the saturated well screen, approximately three to five wetted casing volumes of groundwater were purged from the well until the following groundwater monitoring parameters had stabilized to within 10% of preceding values: pH, electrical conductivity, and temperature. Purged groundwater was stored onsite in DOT approved 55 gallon barrels pending the results of laboratory analysis of samples.

Following groundwater purging, the flow rate of the submersible pump was reduced to 200 milliliters/minute. To collect a representative groundwater sample, the pump intake valve was positioned at the approximate mid-point of the saturated well screen interval. The recovered water was discharged into three labeled 40-ml capacity vials, preserved with HCl.

2.2 Field QA/QC Procedures

Duplicate groundwater samples were collected for the sampling round on 18 and 19 December 1996 for quality control purposes. The duplicates were collected in three HCl-preserved vials and identified by inserting the collection date after "DW-" (DW-121896 and DW-121996). No further sample identification was provided to the laboratory. Duplicate samples were taken on 18 and 19 December from observation wells WCC-1S and WCC-6S, respectively.

Following decontamination of the submersible pump, and prior to collection of groundwater samples from the successive well, an equipment rinsate blank was prepared for laboratory analysis. The equipment rinsate blank was prepared by pouring Reagent Grade II water, prepared by the analytical laboratory, over the pump and collecting the rinsate in two 40-ml vials preserved with HCl. The blank was identified following a similar protocol to that used for duplicate water samples and is identified as "EB" followed by the date. EB121996 was collected after sampling well DAC-P1. A trip blank was also analyzed for sampling and shipping activities and was identified as TB-121896.

All groundwater, duplicate, and field blank samples were transported in ice-cooled chests to Quanterra Environmental Services, Santa Ana, California using U.S. EPA-recommended Chain-of-Custody procedures.

3.0 EVALUATION OF ANALYTICAL RESULTS

3.1 Groundwater Gradient

Groundwater levels were measured prior to sampling on 17 December 1996 (Table 4 and Appendix C). The shallow zone groundwater elevations measured for this quarter ranged from 14.34 feet below mean sea level (MSL) to 15.64 feet below MSL, reflecting a rise in groundwater elevations of about 0.30 feet since the last quarter. An estimated potentiometric surface map for the shallow zone as measured on this day is presented as Figure 4. The groundwater gradient in the shallow zone was generally east to east-southeast with a southerly directed trough-like depression between observation wells WCC-12S and WCC-7S.

Insufficient data (two wells) are available to define the groundwater gradient in the deeper zone. Groundwater elevations in the two wells (WCC-1D and WCC-3D) were approximately 15.34 and 15.21 feet below MSL, respectively.

3.2 Analytical Data

The results of chemical analysis of groundwater and duplicate samples are summarized in Tables 2 and 3. Table 2 lists major constituents and Table 3 lists additional minor constituents of samples tested. The duplicate groundwater samples are indicated by an asterisk and are presented with the "original" groundwater samples. These tables include cumulative analytical data for all monitoring wells and detection limits (where available) for the listed chemicals.

The following observations are noted:

- Data for groundwater samples collected from well DAC-P1, located at the upgradient property boundary, indicate a TCE concentration of 15,000 micrograms per liter ($\mu\text{g}/\text{L}$) coming onto DAC's property (Figure 3). Toluene was also detected in well DAC-P1 at 610 $\mu\text{g}/\text{L}$. The concentrations of these chemicals were within historical ranges. DAC-P1 is screened in the shallow zone.
- Background concentrations of TCE and 1,1-DCE increased in the shallow zone upgradient or cross gradient wells WCC-2S and WCC-11S. Both contaminants are within historical ranges at concentrations of 120 to 170 $\mu\text{g}/\text{L}$ of TCE and 28 to 30 $\mu\text{g}/\text{L}$ of 1,1-DCE.
- Groundwater elevation data (Figure 4) and chemical concentration data (Figure 3) indicate that chemical transport in the shallow zone is generally in a southerly and southeasterly direction in the vicinity of buildings 36 and 41. Most chemical concentration data from the eastern boundary observation wells (WCC-5S, and WCC-9S) are within the same range or lower than upgradient or cross gradient "background level" wells (WCC-2S and WCC-11S).
- In general, variances of the other chemical concentrations since the last sampling remain within typical historical ranges.
- Low concentrations of 1-methylethylbenzene (MEB) were detected in samples collected from wells WCC-5S, WCC-9S, WCC-1D, and WCC-3D at 2.0, 1.5, 1.2, and 1.1 $\mu\text{g}/\text{L}$, respectively.
- Analytical data from the equipment rinsate blank, sample duplicates, trip blank, and laboratory spikes and duplicates are indicative of reliable data.

TABLE 1

OBSERVATION WELL CONSTRUCTION DETAILS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

Well	Date Constructed	Well Diameter (inches)	Total Depth of Borehole (Feet)	Depth of Screened Interval (Feet)	Depth to top of Sand Filter Pack (Feet)	Well Casing Material and Slot Size	Hydrogeologic Unit Screened
WCC-1S ¹	3/26/87	2	91	78-88	72	Schedule 40 PVC 0.020-Inch Slots	Shallow
WCC-2S ¹	10/28/87	4	90.5	70-90	63	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-3S ¹	10/26/87	4	92	69-89	64	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-4S ¹	10/27/87	4	91.5	70.5-90.5	65	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-5S ¹	11/24/87	4	91	60.5-91	58.5	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-6S ²	9/22/89	4	91	60-90	N/A ³	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-7S ²	6/8/89	4	90.5	60-90	54	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-8S ²	6/12/89	4	90	59.5-89.5	54	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-9S ²	9/21/89	4	91.5	60-90	55	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-10S ²	6/7/89	4	90.8	60-90	54	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-11S	N/A	4	N/A	60-90(?)	N/A	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-12S	N/A	4	N/A	60-90(?)	N/A	Schedule 40 PVC 0.010-Inch Slots	Shallow
DAC-P ¹	9/25/89	4	N/A	60-90(?)	N/A	Schedule 40 PVC 0.010-Inch Slots	Shallow
WCC-1D ²	6/30/89	4	140	120-140	115	Schedule 40 PVC 0.010-Inch Slots	Deeper
WCC-3D ²	6/27/89	4	140	120-140	114	Schedule 40 PVC 0.010-Inch Slots	Deeper
MW-8 ⁴	5/10/89	4	85	65-80	62	PVC blank and 316 Stainless Steel 0.020-inch Slot Screen	Shallow
MW-9 ⁴	5/9/89	4	85	66-81	61	PVC blank and 316 Stainless Steel 0.020-inch Slot Screen	Shallow
MW-18 ⁴	3/29/90	4	84	68-83	67	PVC blank and 316 Stainless Steel 0.020-inch Slot Screen	Shallow
MW-19 ⁴	3/30/90	4	80	63-79	62	PVC blank and 316 Stainless Steel 0.020-inch Slot Screen	Shallow

NOTES:

1. Data from Woodward-Clyde Consultants Phase II Report, May 1988
2. Data from Woodward-Clyde Consultants Phase III Report, March 1990
3. N/A = Not Available
4. Data from Hargis + Associates, Final Draft, Remedial Investigation, Montrose Site, Torrance, Ca, October 1992
5. Well WCC-10S was covered or destroyed, and was not sampled in December 1996

TABLES

SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 94401602

TABLE 2

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL ID.	SAMPLE DATE	1,1-DCE			1,1,1-TCA			TCE			MIBK			cis-1,2-DCE			trans-1,2-DCE			CHLOROFORM			BENZENE			TOLUENE			MEK		
		1,1-DCA	-	-	300	260/120	5,500/3,600	4,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WCC-1S	03/27/87	2,800	-	300	260/120	5,500/3,600	4,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	*04/13/87	3,700/2,500	-/-	23	160	5,200	5,500/3,600	5,200	-/-	-/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/11/87	3,000	<20	67	2,400	<100	2,400	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	07/13/89	900	<20	30	<30	2,800	<100	2,800	<100	41	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30		
	08/23/89	1,500	30	-	-	3,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/18/91	1,300	-	-	-	3,800	<100	3,800	<100	<5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		
	06/17/92	1,700	<50	50	-	16	3,400	<5	<1	14	13	37	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	09/23/92	1,500	13	16	30	<30	3,100	<100	<100	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30		
	12/09/92	1,500	<30	13	15	2,100	<5	<5	<5	27	15	14	33	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
	03/18/93	1,000	13	15	20	2,400	<200	2,400	<200	27	27	27	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	06/08/93	1,200	<20	20	20	3,300	<200	3,300	<200	27	27	27	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	08/25/93	1,700	<20	20	20	2,600	<200	2,600	<200	25	25	25	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	11/11/93	1,600	<20	20	20	2,700	<200	2,700	<200	33	33	39	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	2/24/94	1,800	<20	20	11	1,700	<100	1,700	<100	20	20	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
	6/13/94	1,000	11	11	40	2,300	<400	2,400	<400	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40		
	9/9/94	1,400	<40	40	24	3,100	<200	3,100	<200	38	36	36	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20		
	12/22/94	3,000	23	24	24	2,300	<200	2,300	<200	22	22	22	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	3/14/95	2,000	<20	20	20	3,200	<200	3,200	<200	29	29	31	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20		
	6/13/95	2,700	20	20	22	2,600	<10	2,600	<10	37	37	16	51	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	9/7/95	1,800	22	22	22	2,600/2,500	nr	2,600/2,500	nr	34/33	40/40	36	57	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	12/15/95*	2,900/2,800	26/26	22/22	24	2,700	<40	2,700	<40	35	45	45	42/42	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	3/04/96	3,000	27	20	20	2,400	<500	2,400	<500	28	39	12	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	6/7/96	2,500	27	50	<50	2,200	<500	2,200	<500	63	63	63	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		
	9/19/96	3,200	<50	<50	<50	2,200/2,300	<500/<500	2,200/2,300	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500		
	12/18/96	2,600/2,600	<50/<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL ID.	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										MEK
		1,1-DCE	1,1'-DCA	1,11-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	
WCC-2S	11/02/87	5	-	5	4	-	-	-	-	-	-	-
	11/12/87	2	-	<1	<1	5	<5	<1	<1	<1	1	6
	7/13/89	<1	<1	<1	8	3	<5	<1	<1	<1	-	-
	8/23/89	-	-	-	110	-	-	-	-	-	75	-
	11/19/91	30	-	<5	100	<10	<5	<5	<5	<5	<5	<10
	06/16/92	30	<5	<1	110/97	<5/<5	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<5/<5
	*09/22/92	18/19	<1/<1	<1/<1	2/2	140/99	<5/<5	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1
	*12/08/92	49/27	<1/<1	<2/<2	110/100	<5/<5	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<10/<10
	*03/17/93	32/33	<2/<2	<2	150	<20	<2	<2	<2	<2	<2	<40
	06/07/93	48	<2	<2	90	<20	<2	<2	<2	<2	<2	<40
	08/24/93	16	<2	<2	94	<20	<2	<2	<2	<2	<2	<40
	11/19/93	41	<2	<2	96	<20	<2	<2	<2	<2	<2	<40
	2/24/94	30	<2	<2	97	<20	<2	<2	<2	<2	<2	<40
	6/10/94	24	<2	<2	150	<20	<2	<2	<2	<2	<2	<40
	9/8/94	37	<2	<2	110	<20	<2	<2	<2	<2	<2	<40
	12/22/94	28	<2	<2	160	<20	<2	<2	<2	<2	<2	<40
	3/13/95	27	<2	<2	130	<20	<2	<2	<2	<2	<2	<40
	6/12/95	30	<2	<2	200	<10	<5	<5	<5	<5	<5	<10
	9/6/95	56	<5	<2	60	nr	<2	<2	<2	<2	<2	nr
	12/15/95	15	<2	<5	21	<10	<5	<5	<5	<5	<5	<10
	3/01/96	<5	<5	<5	33	nr	<1	<5	<5	<5	<1	<10
	6/6/96	7	<1	<2	98	<10	<2	2.2	<2	<2	<2	<20
	9/19/96	23	-	-	120	<20	-	-	-	-	-	<20
	12/18/96	30	-	-	-	-	-	-	-	-	-	-

TABLE 2
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 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL I.D.	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										MEK
		1,1-DCE	1,1-DCA	1,1-TCA	TCE	MBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	
WCC-3S	11/02/87	38,000	-	110,000	10,000	54,000	-	-	-	-	80,000	-
	11/12/87	88,000	1,000	54,000	11,000	70,000	<500	1,000	-	-	140,000	-
	7/13/89	18,000	<500	56,000	7,700	<3000	<500	660	<500	<500	32,000	-
	08/23/89	56,000	<1,000	78,000	6,000	<5000	<1,000	<1,000	<1,000	<1,000	56,000	-
	11/14/91	12,000	400	6,900	7,900	70,000	550	550	250	-	27,000	12,000
	06/11/92	25,000	<5,000	13,000	13,000	100,000	<5,000	<5,000	<5,000	<5,000	51,000	<10,000
	09/23/92	22,000	<500	7,800	12,000	82,000	<500	<500	<500	<500	52,000	<3,000
	12/01/92	21,000	<500	5,600	11,000	90,000	700	600	600	<500	44,000	4,000
*03/18/93	20,000/20,000	650/510	21,000/22,000	8,800/8,800	44,000/45,000	650/640	640/670	640/670	640/670	240/260	42,000/42,000	<50/<50
06/08/93	16,000	420	5,900	8,600	79,000	520	480	<100	210	37,000	<2,000	<8,000/660
*08/25/93	21,000/20,000	500/560	10,000/9,500	11,000/9,700	50,000/49,000	670/700	680/710	<400/<10	<400/250	46,000/40,000	<10,000	<4,000
11/19/93	26,000	690	19,000	10,000	47,000	1,100	840	<200	280	50,000	<4,000	<4,000
2/24/94	15,000	310	9,600	2,500	15,000	2,500	360	<200	<200	25,000	<4,000	<4,000
6/13/94	13,000	310	6,200	820	9,900	4,100	360	<200	<200	23,000	<4,000	<4,000
*9/9/94	23,000/25,000	520/560	9,000/9,800	<500/<500	6,000/5,000	7,700/8,400	600/640	<500/<500	<500/<500	43,000/47,000	<10,000/<10,000	<4,000
12/22/94	20,000	440	6,700	390	3,400	3,400	6,700	530	<200	200	35,000	<4,000
3/14/95	24,000	570	8,700	2,300	4,600	6,200	6,700	530	<200	230	40,000	<4,000
6/13/95	22,000	450	4,800	1,200	6,600	6,300	500	<400	<400	39,000	<8,000	<8,000
9/7/95	13,000	480	4,100	910	4,600	6,000	520	76	220	31,000	<2,000	<2,000
12/16/95	12,000	350	3,100	670	nr	4,400	400	45	130	**23000	nr	nr
3/04/96	8,400	230	1,900	480	200	3,200	280	<50	100	15,000	<100	<100
3/4/96	11,000	310	2,400	240	nr	3,400	340	38	110	18,000	32	32
9/19/96	20,000	600	3,500	<500	6,300	860	<500	<500	29,000	29,000	<5,000	<5,000
12/19/96	16,000	380	2,300	<250	4,100	460	<250	<250	20,000	<2,500	<2,500	<2,500

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL ID	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										
		1,1-DCE	1,1'-DCA	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
WCC-4S	11/02/87	360	-	14	700	-	-	2	2	-	-	-
	11/11/87	1,200	-	35	690	-	-	<3	<3	<3	<3	-
	7/13/89	170	<3	11	270	-	10	15	<5	<5	<5	-
	08/23/89	360	<5	7	410	<20	15	<5	-	-	-	-
	11/18/91	1,000	-	20	2,200	<30	-	<25	<25	<25	<25	<50
	06/17/92	920	<25	<25	1,500	<50	<25	<25	<25	<25	<25	<50
	09/23/92	1,400	<10	20	1,900	<50	<10	<10	10	10	<10	<50
	12/08/92	1,000	<10	20	1,600	<50	10	<10	10	<10	<10	<50
	03/17/93	810	8	14	1,200	<5	8	5	5	6	<2	<10
	06/08/93	1,300	<10	12	1,800	<100	10	<10	<10	<10	<10	<200
	08/25/93	1,100	<10	<10	1,400	<100	<10	<10	<10	<10	<10	<200
	11/19/93	610	17	8	700	<40	6	5	<4	4	9	<80
	2/24/94	1,100	5.8	8.8	980	<40	8.7	7.2	5.1	6.4	<4	<80
	6/14/94	800	<4	5	940	<40	7	5	<4	<4	<4	<80
	9/9/94	1,000	<20	<20	1,300	<200	<20	<20	<20	<20	<20	<400
	12/22/94	670	<10	<10	750	<100	<10	<10	<10	<10	<10	<200
	3/14/95	400	10	5	450	<40	5	<4	<4	<4	<4	<80
	6/13/95	1,100	9	<6.6	1,100	<66	8	<6.6	<6.6	7	<6.6	<130
	9/7/95	910	8	6	1,200	<10	10	9	7	13	<5	<10
	12/15/95	1,100	4	<2	1,200	nr	8	7	4	2	<2	nr
	3/04/96	710	<5	<5	770	<10	6	6	<5	<5	<5	<10
	6/7/96	740	<5	<25	830	nr	5	<5	<5	<5	<5	<10
	9/19/96	980	<25	<25	960	<250	<25	<25	<25	<25	<25	<250
	12/18/96	780	<25	<25	960	<25	<25	<25	<25	<25	<25	<250

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL ID.	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l									
		1,1-DCE	1,1-DCA	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE
WCC-5S	11/30/87	7	-	1	-	-	-	-	-	1	-
	01/08/88	4	-	10	-	<1/<5	<1	6/6	<1/<1	<1	-
	*07/13/89	3/3	<1	13/12	<5	<5	<1/<1	<1	<1	<1	-
	08/23/89	<1	-	12	-	-	-	4	-	-	-
	11/19/91	20	-	-	8	-	-	-	-	7	-
	06/15/92	28	<5	-	7	<10	-	-	-	<5	<10
	09/21/92	21	<1	<1	5	<5	<1	<1	<1	<1	<5
	12/07/92	21	<1	<1	5	<5	<1	<1	<1	<1	<5
	03/16/93	18	<2	<2	4	<5	<2	<2	<2	<2	<10
	06/07/93	22	<2	<2	4	<20	<2	<2	<2	<2	<40
	08/24/93	23	<2	<2	5	<20	<2	<2	<2	<2	<40
	11/18/93	21	<2	<2	3	<20	<2	<2	<2	<2	<40
	2/23/94	20	<2	<2	4	<20	<2	<2	<2	<2	<40
	*6/10/94	25/25	<2/<2	<2/<2	3/3.4	<20/<20	<2/<2	<2/<2	<2/<2	<2/<2	<40/<40
	9/8/94	18	<2	<2	3.3	<20	<2	<2	<2	<2	<40
	12/21/94	18	<2	<2	2.9	<20	<2	<2	<2	<2	<40
	3/13/95	14	<2	<2	2.8	<20	<2	<2	<2	<2	<40
	6/12/95	19	<2	<2	3.2	<20	<2	<2	<2	<2	<40
	9/6/95	18	<5	<5	<5	<10	<5	<5	<5	<5	<10
	12/12/95	15	<2	<2	3	nr	<2	<2	<2	<2	nr
	2/29/96	10	<5	<5	<5	<10	<5	<5	<5	<5	<10
	6/6/96	9	<1	<1	3.1	<10	<1	<1	<1	<1	<10
	9/18/96	10	<1	<1	2.4	<10	<1	<1	<1	<1	<10
	12/17/96	10	<1	<1	-	-	-	-	-	-	<10

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL ID	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										MEK
		1,1-DCE	1,1-DCA	1,11-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	
WCC-6S	10/06/89	210	4	130	140	<5	12	7	<1	<1	<1	-
	11/16/91	5,800	5,000	2,100	3,000	7,600	<500	-	-	35,000	15,000	21,000
	06/17/92	5,400	<500	1,300	3,100	7,500	200	170	<500	<500	6,300	6,300
*12/09/92	5,900	94	80/<100	680/1,400	2,700/3,200	3,400/<500	200/200	100/200	<50/<100	80/<100	5,000/10,000	3,000/5,000
03/17/93	3,700/5,600	50	1,200	1,400	1,400	3,900/<500	<10	80	15	40	10,000	3,800
06/08/93	5,500	<100	1,900	2,100	1,900	13,000	260	120	<100	<100	21,000	7,800
08/25/93	5,400	<100	2,100	1,900	11,000	630	130	<100	<100	19,000	7,600	7,600
11/19/93	2,200	42	440	670	4,700	480	<10	24	24	4,900	3,100	3,100
2/24/94	11,000	91	2,200	1,800	13,000	1,400	140	21	52	20,000	4,400	4,400
*6/13/94	5,800/6,300	87/<100	1,900/1,500	1,400/1,300	4,400/5,200	1,600/1,400	130/100	18/<100	52/<100	12,000/<13,000	1,400/<2,000	1,400/<2,000
9/9/94	Not sampled; well head obstructed											
12/2/94	9,100	<200	1,300	1,900	4,800	2,500	<200	<200	<200	16,000	<4,000	<4,000
3/14/95	3,000	38	200	930	390	850	60	<20	25	2,300	<400	<400
6/13/95	9,800	130	810	510	450	4,200	180	28	82	8,400	<400	<400
*9/7/95	4,300/3,800	55/70	370/310	620/520	240/180	2,400/2,200	83/99	14/19	50/56	2,900/2,500	12/11	12/11
12/16/95	11,000	120	1,400	2,000	nr	2,600	160	28	66	4,900	nr	nr
3/04/96	8,300	93	1,600	2,000	350	2,000	140	<50	56	3,900	340	340
6/7/96	9,300	88	1,700	2,400	nr	3,000	120	<25	54	6,500	960	960
*9/11/96	8,800/8,800	<250/110	890/950	2,000/2,200	<2,500/<1,000	1,800/1,800	250/160	<250/<100	<250/<100	4,000/4,300	<2,500/<1,000	<2,500/<1,000
12/19/96	7,000/8,300	<100/<100	680/820	2,200/2,600	<1,000/<1,000	880/1,000	110/130	<100/<100	<100/<100	2,600/3,000	<1,000/<1,000	<1,000/<1,000

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

WELL ID.	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										MEK
		1,1-DCE	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE		
WCC-7S	07/13/89	850	<10	110	1,300	<50	26	11	<10	<10	-	-
	08/23/89	1,100	<30	66	1,400	<100	31	<30	<30	<30	-	-
	11/18/91	390	-	-	1,200	-	-	-	-	-	-	-
	06/17/92	230	<5	<5	560	<10	<5	<5	<5	<5	<5	<10
	09/23/92	140	<5	<5	570	<30	<5	<5	<5	<5	<5	<30
	12/08/92	140	<5	<5	430	<30	<5	<5	<5	<5	<5	<30
	03/17/93	77	<2	<2	200	<5	4	<2	<2	<2	<2	<10
	06/07/93	120	<2	<2	330	<20	4	<2	<2	<2	<2	<40
	08/25/93	70	<4	<4	210	<40	4	<4	<4	<4	<4	<80
	11/19/93	56	<2	<2	130	<20	<2	<2	<2	<2	<2	<40
	2/24/94	75	<2	<2	140	<20	2.5	<2	<2	<2	<2	<40
	6/13/94	58	<2	<2	110	<20	3	<2	<2	<2	<2	<40
	9/8/94	50	13	<2	250	<20	<2	<2	<2	<2	<2	<40
	12/22/94	94	<2	<2	94	<20	<2	<2	<2	<2	<2	<40
	3/14/95	53	<2	<2	84	<20	<2	<2	<2	<2	<2	<40
*6/13/95	110/98	<2/<2	<2/<2	230/220	<20/<20	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<40/<40
9/7/95	150	<5	<5	200	<10	<5	<5	<5	<5	<5	<5	<10
12/15/95	98	<2	<2	140	nr	<2	<2	<2	<2	<2	<2	nr
3/01/96	91	<5	<5	120	<10	<5	<5	<5	<5	<5	<5	<10
6/7/96	100	<5	<5	130	<10	<5	<5	<5	<5	<5	<5	<10
9/19/96	120	<2	<2	150	<20	<2	<2	<2	<2	<2	<2	<20
12/18/96	99	<2	<2	130	<20	<2	<2	<2	<2	<2	<2	<20

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL ID.	SAMPLE DATE	1,1-DCE	1,1-DCA	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
WCC-8S	07/13/89	430	<5	160	240	<30	7	9	<5	<5	<5	-
	08/23/89	820	<5	130	430	<30	7	<5	<5	<5	<5	-
	11/15/91	2,600	-	400	3,000	<50/<100	40	40	25	-	120	<50/<100
	*06/17/92	2,200/2,300	<25/<50	180/180	2,400/2,600	<50/<100	<25/<50	<25/<50	<25/<50	<25/<50	<25/<50	<20
	09/23/92	2,800	<20	200	3,100	<100	<20	20	20	20	<20	<100
	12/08/92	2,000	<20	100	2,500	<100	20	30	20	20	<20	<100
	03/17/93	1,800	11	180	1,500	<5	15	26	10	15	<2	<10
	06/08/93	3,000	<20	300	2,000	<200	<20	40	<20	<20	<20	<400
	08/25/93	3,100	<20	330	2,200	<200	<20	45	<20	<20	<20	<400
	11/19/96	3,300	<20	330	2,000	<200	<20	50	<20	24	<20	<400
	2/24/94	3,400	<20	300	1,200	<200	<20	35	<20	<20	<20	<400
	6/3/94	4,000	<40	290	2,200	<400	<40	44	<40	<40	<40	<800
	9/9/94	4,600	<50	280	3,100	<500	<50	<50	<50	<50	<50	<1000
	12/22/94	4,000	<20	230	2,100	<200	<20	43	<20	25	<20	<400
	3/14/95	4,500	<40	220	2,600	<400	<40	41	<40	<40	<40	<800
	6/13/95	4,200	<40	150	2,400	<400	<40	40	<40	<40	<40	<800
	9/7/95	2,200	10	110	1,700	<10	15	28	9	22	<5	<10
	12/15/95	4,200	16	120	2,300	nr	18	40	<2	10	<2	nr
	3,500/3,600	<20/<20	120/120	2,100/2,200	<40/<40	<20/<20	40/41	<20/<20	<20/<20	<20/<20	<5	<40/<40
	*3/01/96	3,300	11	91	2,000	nr	12	32	10	<5	<5	<10
	6/7/96	3,400	<50	59	1,900	<500	<50	<50	<50	<50	<50	<500
	9/19/96	3,000	<50	61	2,000	<500	<50	<50	<50	<50	<50	<500
	12/16/96											

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL ID.	SAMPLE DATE	1,1-DCE	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
WCC-9S	10/06/89	<1	<1	15	<5	7	<1	<1	<1	<1	-
	11/1/91	-	-	20	-	-	-	-	-	-	<10
06/15/92	7	<5	<5	42	<10	<5	<5	<5	<5	<5	<5
09/21/92	6	<1	<1	45	<5	2	<1	6	<1	<1	<5
12/07/92	10	<1	<1	51	<5	<1	<1	12	<1	<1	<5
03/16/93	6	<2	<2	23	<5	3	<2	11	<2	<2	<10
*06/07/93	11/1/11	<2/<2	<2/<2	42/39	<20/<20	<2/<2	<2/<2	18/17	<2/<2	<2/<2	<40/<40
08/24/93	5	<2	<2	26	<20	4	<2	<2	<2	<2	<40
11/18/93	5	<2	<2	43	<20	<2	<2	7	<2	<2	<40
2/23/94	<4	<2	<2	31	<20	2	<2	4	<2	<2	<40
6/10/94	<4	<2	<2	28	<20	4	<2	3	<2	<2	<40
9/8/94	<4	<2	<2	38	<20	3	<2	4	<2	<2	<40
*12/21/94	<4/<4	<2/<2	<2/<2	22/26	<20/<20	3.1/3.3	<2/<2	<2/<2	<2/<2	<2/<2	<40/<40
3/13/95	7	<2	<2	56	<20	<2	<2	8	<2	<2	<40
*6/12/95	<4/<4	<2/<2	<2/<2	23/21	<20/<20	<2/<2	<2/<2	6.4/6	<2/<2	<2/<2	<40/<40
9/6/95	11	<5	<5	64	<10	<5	<5	19	<5	<5	<10
12/12/95	4	<2	<2	18	nr	3	<2	4	<2	<2	nr
2/29/96	<5	<5	<5	17	<10	<5	<5	<5	<5	<5	<10
6/6/96	<5	<5	<5	15	nr	<5	<5	<5	<5	<5	<10
9/18/96	2.2	<1	<1	17	<10	2.9	<1	3.9	<1	<1	<10
12/17/96	2.8	<1	<1	18	<10	2.8	<1	3.5	<1	<1	<10

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 K/J 944016.02

WELL ID	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										MEK
		1,1-DCE	1,1-DCA	1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	
WCC-10S	*07/13/89	2/1	<1/<1	<1/<1	86/87	<5/<5	<1/<1	<1/<1	3/3	<1/<1	<1	-
	08/23/89	4	<1	-	81	5	<1	-	4	<1	-	-
	11/20/91	-	-	-	87	-	-	-	-	-	-	-
	06/16/92	10	<5	<5	120	<10	<5	<5	4/4	<1/<1	<5	13
	*08/21/92	9/9	<1/<1	<1/<1	120/110	<5/<5	<1/<1	<1/<1	5	<1	<1	<5
	12/8/92	8	<1	<1	110	<5	<1	<2	6	<2	<2	<10
	03/16/93	9	<2	<2	130	<5	<2	<2	4	<2	<2	<40
	06/07/93	13	<2	<2	120	<20	<2	<2	2	<2	<2	<40
	08/25/93	<4	<2	<2	120	<20	<2	<2	<2	<2	<2	<40
	11/19/93	9	<2	<2	82	<20	<2	<2	2	<2	<2	<40
	2/23/94	10	<2	<2	110	<20	<2	<2	5	<2	<2	<40
	6/10/94	17	<2	<2	120	<20	<2	<2	4	<2	<2	<40
	9/8/94	17	<2	<2	130	<20	<2	<2	2	<2	<2	<40
	*12/22/94	14/13	<2/<2	<2/<2	99/94	<20/<20	<2/<2	<2/<2	3.1/3.0	<2/<2	<2	<40
	*3/13/95	19/19	<2/<2	<2/<2	120/130	<20/<20	<2/<2	<2/<2	2.2/2.3	<2	<2	<40
	6/12/95	20	<2	<2	140	<20	<2	<2	2	<2	<2	-
	9/6/95	27	<5	<5	160	<10	<5	<5	5	<5	<5	<10
	12/16/95	23	<2	<2	135	nr	<2	<2	4	<2	<2	nr
	03/01/96	20	<5	<5	120	<10	<5	<5	5	<5	<5	<10
	6/6/96	22	<5	<5	140	nr	<5	<5	5	<5	<5	<10
	9/19/96	22	<2	<2	120	<20	<2	<2	2.5	<2	<2	-
	12/16/96											-
	Well has been covered or destroyed											-

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.												
WELL I.D.	SAMPLE DATE	1,1-DCE	1,1-DCA	1,1,1-TCA	TOC	MIBK	dis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
W/CC-11S	11/15/91	10	-	<5	80	-	<5	<5	-	-	<5	<10
	06/16/92	21	<5	<1	120	<10	<1	<1	<1	<1	<1	<5
	09/21/92	17	<1	<1	140	<5	2	<1	<1	<1	<1	<5
	12/08/92	13	<1	<1	83	<5	6	<1	<1	<1	<1	<5
	03/11/93	25	<2	<2	160	<5	4	<2	<2	<2	<2	<10
	06/07/93	16	<2	<2	110	<20	5	<2	<2	<2	<2	<40
	08/24/93	14	<2	<2	97	<20	4	<2	<2	<2	<2	<40
*11/19/93	14/14	<2/<2	<2/<2	100/100	<20/<20	3/3	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<40/<40
2/23/94	16	<2	<2	100	<20	4	<2	<2	<2	<2	<2	<40
6/10/94	16	<2	<2	85	<20	5	<2	<2	<2	<2	<2	<40
*9/8/94	20/19	<2/<2	<2/<2	140/120	<20/<20	4.8/5.9	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<40/<40
12/21/94	26	<2	6	130	<20	4	<2	<2	<2	<2	<2	<40
3/13/95	16	<2	<2	100	<20	6	<2	<2	<2	<2	<2	<40
6/12/95	22	<2	<2	130	<20	6	<2	<2	<2	<2	<2	<40
*9/6/95	31/30	<5/<5	<5/<5	190/200	<10/<10	nr	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<10/<10
12/15/95	34	<2	<2	210	<10	5	<2	<2	<2	<2	<2	nr
3/1/96	30	<5	<5	170	<10	<5	<5	<5	<5	<5	<5	<10
*6/6/96	28/29	<5/<5	<5/<5	170/170	nr/nr	<5	<5	<5	<5	<5	<5	<50
9/19/96	22	<5	<2	150	<50	<5	<5	<5	<5	<5	<5	<50
12/18/96	28	<2	<2	170	<20	6.1	<2	<2	<2	<2	<2	<20

TABLE 2
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8250 - All results in ug/l.												
WELL ID	SAMPLE DATE	1,1-DCE	1,1-DCA	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
WCC-12S	11/18/91	300	-	17	900	<10<10	<5<5	<5<5	-	-	-	-
	*06/16/92	250/260	<5/5	<5	660/710	<5	<1	<1	<5<5	<1	<1	<10/10
	09/22/92	130	7	1	500	<30	5	<5	<5	<5	<5	<5
	12/08/92	160	<5	<5	550	<5	4	8	3	<2	<2	<30
	03/17/93	100	7	<2	410	<20	5	<2	<2	<2	<2	<10
	06/07/93	130	2	<2	370	<20	5	<4	<4	<4	<4	<40
	08/12/93	100	<4	<4	390	<40	<4	<4	<4	9	<80	<80
	11/19/93	45	9	<2	220	<20	<2	<2	<2	<2	<2	<40
	2/24/94	89/77	7.7/3.9	<2<2	270/220	<20<20	2.9/3.3	<2<2	<2<2	<2	<2	<40/<40
	6/13/94	84	15	<2	270	<20	3	<2	2	<2	<2	<40
	9/9/94	97	<2	<2	160	<20	<2	<2	<2	<2	<2	<40
	12/22/94	52	17	<2	190	<20	2	<2	<2	<2	<2	<40
	3/14/95	53	18	<2	230	<20	<2	<2	3	<2	<2	<40
	6/12/95	72	28	<2	330	<20	<2	<2	3	<2	<2	<40
	9/6/95	60	32	<5	300	<10	<5	<5	<5	<5	<5	<10
	12/15/95	44	10	<2	140	nr	3	<2	2	<2	<2	nr
	3/0/96	47	13	<5	150	<10	<5	<5	<5	<5	<5	<10
	6/7/96	37	12	<5	140	nr	<5	<5	2.2	<2	<2	<20
	9/19/96	48	15	<2	150	<20	2.5	<2	2.0	<2	<2	<20
	12/18/96	43	16	<2	150	<20	2.5	<2				

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL ID.	SAMPLE DATE	1,1-DCE	1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
DAC-P1	10/09/89	<200	<200	<200	17,000	<1,000	<200	<200	<200	<200	<1,000
	6/11/92	<5	<5	<5	21,000	<10	<5	10	<5	<5	<10
	*06/23/92	4/4	<1/<1	<1/<1	28,000/28,000	<5/<5	71/70	1/2	54/51	5/5	<5/<5
	12/09/92	<300	<500	<500	29,000	<3,000	<500	<500	<500	<500	<3,000
	03/18/93	21	<2	44	21,000	7	68	2	44	5	<10
	06/08/93	<200	<100	<100	28,000	<1,000	<100	<100	<100	130	<2,000
	08/25/93	<400	<200	<200	27,000	<2,000	<200	<200	<200	300	<4,000
	11/19/93	<40	<20	<20	24,000	<200	81	<20	52	<20	<400
	2/24/94	<40	<20	<20	20,000	<200	89	<20	47	<20	<400
	6/13/94	<40	<20	<20	20,000	<200	92	<20	46	<20	<400
	9/9/94	<400	<200	<200	18,000	<2,000	<200	<200	<200	<200	<4,000
	12/22/94	<400	<200	<200	11,000	<2,000	<200	<200	<200	<200	<4,000
	3/14/95	<400	<200	<200	21,000	<2,000	<200	<200	<200	<200	<4,000
	6/13/95	<400	<200	<200	18,000	<2000	<200	<200	<200	<200	<4,000
	9/7/95	12	<5	<5	13,000	<10	89	<5	33	53	<10
	12/16/95	120	2	38	20,000	nr	130	5	45	5	nr
	*3/04/96	100/100	<100/<100	<100/100	15,000/16,000	<200/<200	100/100	<100/<100	<100/<100	680	<200/<200
	*6/7/96	190/180	<50/<25	<50/45	13,000/12,000	nr/nr	95/95	<50/<25	<50/29	490/490	<100/<50
	9/19/96	350	<250	<250	15,000	<2,500	<250	<250	<250	740	<2,500
	12/19/96	<500	<500	<500	15,000	<5,000	<500	<500	<500	610	<5,000

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
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WELL ID	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l										MEK
		1,1-DCE	1,1,1-TCA	1,1,1-DCA	1,1,1-TCA	TOE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	
WCC-1D	07/25/89	<1	<1	<1	2	<5	1	<1	<1	-	1	-
	08/23/89	<1	<1	1	2	<5	<1	<1	<1	-	<1	-
	11/15/91	90	-	8	40	<50/<65	<25/<25	-	<25/<25	<25/<25	20	-
	*06/15/92	1,500/1,300	<25/<25	63/64	230/210	<5	2	<1	<1	<1	<5	<50/<50
	09/22/92	180	<1	8	44	<5	2/1<1	<1/1<1	1/1	<1/1<1	<1/3	<5/<5
	*12/07/92	160/150	<1/<1	8/160	41/6	<5/<5	3	<2	<2	<2	<2	<10
	03/16/93	200	<2	19	23	<5	3	<2	<2	<2	<2	<10
	*06/08/93	500/480	<10/<4	14/17	71/72	<100/<40	<10/<4	<10/<4	<10/<4	<10/<4	<10/<4	<200/<80
	08/24/93	540	<2	16	67	<20	3	2	<2	<2	2	<40
	11/18/93	880	<2	16	110	<20	3	3	<2	<2	<2	<40
	2/23/94	140	<2	3	14	<20	<2	<2	<2	<2	<2	<40
	6/10/94	230	<2	4	24	<20	<2	<2	<2	<2	<2	<40
	9/8/94	210	<2	4	37	<20	<2	<2	<2	<2	<2	<40
	12/22/94	600	<2	10	71	<20	2	2	<2	<2	<2	<40
	3/13/95	240	<4	38	40	<4	<4	<4	<4	<4	<4	<80
	6/13/95	170	<2	<2	21	<20	2	<2	<2	<2	<2	<40
	9/3/95	150	<5	<5	29	<10	<5	<5	<5	<5	<5	<10
	12/16/95	12	<2	<2	23	nr	3	<2	<2	<2	<2	nr
	*2/29/96	<5/<5	<5/<5	<5/<5	<10/<10	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<10/<10
	6/6/96	<5	<5	<5	<5	nr	<5	<5	<5	<5	<5	<10
	*9/18/96	<1/<1	<1/<1	3.5/3.6	<10/<10	1.3/1.4	<1	<1/1<1	<1	<1/1<1	<1	<10/<10
	12/18/96	<1	<1	<1	3.5	<10	1.4	<1	<1	<1	<1	<10

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MAJOR CONSTITUENTS
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DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

WELL I.D.	SAMPLE DATE	COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.										
		1,1-DCE	1,1,DCA	1,1,1-TCA	TCE	MIBK	cis-1,2-DCE	trans-1,2-DCE	CHLOROFORM	BENZENE	TOLUENE	MEK
WCC-3D	07/25/89	<1	<1	49	4	<5	11	<1	<1	3	-	-
	08/23/89	<10	<10	32	<10	<50	<10	<10	-	<10	-	-
	11/14/91	20	-	60	-	-	-	-	<5	<5	<8	<10
	06/16/92	510	<5	880	23	<10	<5	<1	<1	<1	<1	<5
	09/22/92	21	<1	27	2	<5	<1	<1	1	1	3	<5
	12/07/92	120	<1	130	5	<5	<1	<1	<1	<1	3	<5
	*03/16/93	950/1,000	6/6	2,000/2,000	50/47	<5/-5	2/2	9/9	<2/<2	<2/<2	6/6	<10/<10
	06/08/93	110	<2	110	6	<20	<2	<2	<2	<2	<2	<40
	08/24/93	120	<2	100	5	<20	<2	<2	<2	<2	3	<40
	*11/18/93	6/10/840	<2/<4	410/640	17/23	<20/<40	<2/4	4/4	<2/4	<2/4	6/8	<40/<80
	2/23/94	370/420	<4/<4	530/590	23/25	<40/<40	<4/<4	<4/<4	<4/<4	<4/<4	12/13	<80/<80
	6/13/94	720	<10	1,300	96	<100	<10	<10	<10	<10	<10	<200
	9/9/94	3,700	<50	5,600	490	<500	<50	<50	<50	<50	<50	<1,000
	12/21/94	5,200	10	6,300	540	<40	15	22	<4	9	5,100	<80
	*3/14/95	3,300/3,200	<40/<20	4,000/3,900	370/380	<400/<200	<40/<20	<40/<20	<40/<20	3,200/3,400	<8000/<400	<200
	6/13/95	1,800	<10	2,100	200	<100	<10	<10	<10	<10	1,700	<200
	9/7/95	3,400	13	4,100	520	170	60	30	5	13	4,700	<10
	12/16/95	111	<2	90	32	nr	3	<2	<2	88	nr	<10
	3/04/96	53	<5	40	23	<10	<5	<5	<5	6	6	<10
	6/7/96	84	<5	59	60	nr	<5	<5	<5	21	21	<10
	9/19/96	52	<1	24	61	<10	2.2	<1	<1	12	12	<10
	12/19/96	97	1.3	67	42	<10	5.4	<1	<1	20	20	<10

ug/l = micrograms per liter

1,1-DCE = Dichloroethene

1,1-DCA = Dichloroethane

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

MIBK = Methyl Isobutyl ketone

cis-1,2,-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE = trans-1,2-Dichloroethene

MEK = Methyl ethyl ketone

Notes:

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
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DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
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TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-2S	11/02/87	-	-	-	-	-	-	-	-	-	-	-
	11/12/87	-	-	-	-	-	-	-	-	-	-	-
	7/13/89	-	-	-	-	-	-	-	-	-	-	-
	8/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/19/91	-	-	-	-	-	-	-	-	-	-	-
	06/16/92	<10	-	<1/1	11/9	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1
	*09/22/92	<5/<5	<1/<1	<1/<1	5/2	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1
	*12/08/92	6/<5	<1/<1	<2/<2	<5/<5	<5/<5	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2
	*03/17/93	<10/<10	<10	<2	<4	<4	<2	<2	<2	<2	<2	<2
	06/07/93	<40	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2
	08/24/93	<40	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2
	11/19/93	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	2/24/94	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	6/10/94	<40	<6	<2	<20	<2	<4	<2	<2	<2	<2	<2
	9/8/94	<40	<6	<2	<10	<2	<4	<2	<2	<2	<2	<2
	12/22/94	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	3/13/95	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	6/12/95	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	9/6/95	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	12/15/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
	3/01/96	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6/6/96	<10	<5	<1	<1	<1	<2	<2	<2	<2	<2	1.1
	9/19/96	<10	<20	<2								<2
	12/18/96											

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
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 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.												
WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethyl-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-3S	11/02/87	-	-	-	-	-	-	-	-	-	-	-
	11/12/87	-	-	-	-	-	-	-	-	-	-	-
	7/13/89	-	-	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/14/91	-	-	-	-	-	-	-	-	-	-	-
	06/17/92	<30,000	-	<500	900	<500	<500	<500	<500	<500	<500	<500
	09/23/92	<3,000	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
	12/09/92	<3,000	<500	<500	<50<50	<25<25	55/60	<10<10	<25/<25	<10<10	100/95	<10/<10
	*03/18/93	<50<50	120/110	<25<25	<200	<100	<200	<100	<100	<100	<100	<100
	06/08/93	<2,000	<100	<400/<10	<800/<50	<400/<10	<800/52	<400/<10	<400/<10	<400/21	<400/86	<400/<10
	*08/25/93	<8,000/<200	<400/154	<200	<200	<1,000	<200	<200	<200	<200	<200	<200
	11/19/93	<4,000	<4,000	<200	<200	<1,000	<200	<400	<200	<200	<200	<200
	2/24/94	<4,000	<4,000	<200	<200	<1,000	<200	<400	<200	<200	<200	<200
	6/13/94	<4000	<6000	<200	<1000	<200	<400	<200	<200	<200	<200	<200
	*9/9/94	<10000/<10000	<1,500/1,500	<500/<500	<2,500/<2,500	<500/<500	<1000/<1000	<500/<500	<500/<500	<500/<500	<500/<500	<500/<500
	12/22/94	<4,000	<400	<200	<1,000	<200	<400	<200	<200	<200	<200	<200
	3/14/95	<4,000	<400	<200	<1,000	<200	<400	<200	<200	<200	<200	<200
	6/13/95	<8,000	<400	<400	<2,000	<400	<800	<400	<400	<400	<400	<400
	9/7/95	39	137	<5	23	<5	64	<5	<5	18	99	<5
	12/16/95	<2	42	<2	<2	<2	22	<2	<2	8	41	<2
	3/04/96	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50
	3/4/96	19	37	<5	13	<5	12	<5	<5	7	41	<5
	9/19/96	<5,000	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
	12/19/96	<2,500	<250	<250	<250	<250	<250	<1,200	<250	<250	<250	<250

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8260 - All results in ug/l.												
WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-4S	11/02/87	-	-	-	-	-	-	-	-	-	-	-
	11/12/87	-	-	-	-	-	-	-	-	-	-	-
	7/13/89	-	-	-	-	-	-	-	-	<10	<10	<10
	08/23/89	-	-	-	-	-	-	-	-	<10	<10	<10
	11/18/91	-	-	-	-	-	-	-	-	<10	<10	<10
	06/17/92	<150	-	<10	20	<10	<10	<10	<10	<10	<10	<10
	09/23/92	<50	<10	<10	50	<10	<10	<10	<10	<10	<10	<10
	12/08/92	<50	<10	<5	<5	<2	<2	<5	<2	<2	<2	<2
	03/17/93	<10	<2	<5	<5	<2	<2	<5	<5	<10	<10	<10
	06/08/93	<200	<10	<10	<40	<10	<20	<10	<10	<10	<10	<10
	08/25/93	<200	<10	<10	<20	<10	<20	<10	<10	<10	<10	<10
	11/19/93	<80	<4	<4	<20	<4	<8	<4	<4	<4	<4	<4
	2/24/94	<80	<4	<4	<20	<4	<8	<4	<4	<4	<4	<4
	6/14/94	<80	<12	<4	<20	<4	<8	<4	<4	<4	<4	<4
	9/9/94	<400	<60	<20	<100	<20	<40	<20	<20	<20	<20	<20
	12/22/94	<200	<20	<10	<50	<10	<20	<10	<10	<10	<10	<10
	3/14/95	<80	<8	<4	<20	<4	<8	<4	<4	<4	<4	<4
	6/13/95	<130	<6.6	<6.6	<33	<1.3	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6
	9/7/95	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	12/15/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
	3/04/96	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6/7/96	<10	<5	<5	<25	<25	<25	<25	<25	<25	<25	<25
	9/19/96	<250	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	12/18/96											

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8260 - All results in ug/l.										
WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene
WCC-5S	11/30/87	-	-	-	-	-	-	-	-	-
	01/08/88	-	-	-	-	-	-	-	-	-
	*07/13/89	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-
	11/19/91	-	-	-	-	-	-	-	-	-
	06/15/92	<10	-	-	-	-	-	-	-	-
	09/21/92	<5	<1	3	8	-	-	-	-	-
	12/07/92	<5	<1	<1	3	<1	<1	<1	<1	<1
	03/16/93	<10	2	<5	<10	<5	<2	<2	<2	<2
	06/07/93	<40	<2	<2	<4	<2	<4	<2	<2	<2
	08/24/93	<40	<2	<2	<4	<2	<4	<2	<2	<2
	11/18/93	<40	<2	<2	<10	<2	<4	<2	<2	<2
	2/23/94	<40	<2	<2	<10	<2	<4	<2	<2	<2
	*6/10/94	<40/<6	<2/<2	<20/<20	<4/<4	<2/<2	<4/<4	<2/<2	<2/<2	<2/<2
	9/8/94	<6	<2	<10	<2	<4	<2	<2	<2	<2
	12/21/94	<40	<4	<2	<10	<2	<4	<2	<2	<2
	3/13/95	<40	<4	<2	<10	<2	<4	<2	<2	<2
	6/12/95	<40	<2	<2	<10	<2	<4	<2	<2	<2
	9/6/95	<10	<5	<5	<5	<5	<5	<5	<5	<5
	12/1/95	<2	<4	<2	<2	<2	<2	<2	<2	<2
	2/29/96	<10	<5	<5	<5	<5	<5	<5	<5	<5
	6/6/96	<10	<5	<1	<1	<1	<1	<1	<1	1.2
	9/18/96	<10	<10	<10	<10	<10	<10	<10	<10	2.0
	12/17/96	<10	<10	<10	<10	<10	<10	<10	<10	<10

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.												
WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylbenzene
WCC-6S	10/06/89	-	-	-	-	-	-	-	-	-	-	-
	11/16/91	-	-	-	-	-	-	-	-	-	-	-
	06/17/92	<3,000	-	-	-	-	-	-	-	-	-	-
	09/23/92	78	26	<1	5	<1	96	<1	5	5	<1	<50/<100
*12/09/92	<300/<500	<50/<100	100/200	<50/<100	<25	<10	<50/<10	<50/<10	<10	50	<25	<50/<100
03/17/93	<50	20	<25	<50	<200	<100	<200	<100	<100	<100	<100	<100
06/08/93	<2,000	<100	<100	<100	<200	<100	<200	<100	<100	<100	<100	<100
08/25/93	<2,000	<100	<100	<100	<200	<100	<200	<100	<100	<100	<100	<100
11/19/93	<200	<10	<10	<50	<10	<20	<10	<10	<10	37	<10	<10
2/24/94	230	58	<10	<50	<10	74	<10	<10	10	47	<10	<10
*6/13/94	<200/<2000	51/<300	<50/<100	<50/<500	<10/<100	69/>200	<10/<100	<10/<10	<10/<100	41/<100	<10/<10	<10/<10
9/9/94	Not sampled; well head obstructed.											
12/22/94	<4,000	<400	<200	<1,000	<200	<400	<200	<200	<200	<200	<200	<200
3/14/95	<400	<40	<20	<100	<20	<40	<20	<20	<20	<20	<20	<20
6/13/95	<400	<20	<20	<100	<20	60	<20	<20	<20	51	<20	<20
*9/7/95	<10/<10	1	<5/<5	<5/<5	<5/<5	1	<5/<5	<5/<5	<2	5	1	<5/<5
12/16/95	<2	28	<2	<2	<50	61	<50	<50	<50	41	<2	<2
3/04/96	<100	<100	<50	<50	<50	<50	<25	<25	<50	<50	<50	<50
6/7/96	<50	<25	<25	<250/<100	<250/<100	53	<1,200/<500	<1,200/<500	<250	39	<25	<250/<100
*9/19/96	<2,500/<1,000	<250/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100
12/19/96	<1,000/<1,000	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.												
WELL ID.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-7S	07/13/89	-	-	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/18/91	-	-	-	-	-	-	-	-	-	-	-
	06/17/92	<30	-	-	-	-	-	-	-	-	-	-
	09/23/92	<30	<5	<5	10	<5	<5	<5	<5	<5	<5	<5
	12/08/92	<30	<5	<5	10	<5	<5	<5	<5	<5	<5	<5
	03/17/93	<10	<5	<5	<10	<5	<2	<2	<2	<2	<2	<2
	06/07/93	<40	<2	<2	<4	<2	<4	<2	<2	<2	<2	<2
	08/25/93	<80	<4	<4	31	<4	<8	<4	<4	<4	<4	<4
	11/19/93	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	2/24/94	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	6/13/94	<40	<6	<2	<10	<2	<4	<2	<2	<2	<2	<2
	9/8/94	<40	<6	<2	<10	<2	<4	<2	<2	<2	<2	<2
	12/22/94	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	3/14/95	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	*6/13/95	<10	<5	<2<2	<10<10	<2<2	<4<4	<2<2	0	<2<2	<2<2	<2<2
	9/7/95	<20<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	12/15/95	<2	<4	<2	<2	<5	<5	<5	<5	<5	<5	<5
	3/01/96	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6/7/96	<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2
	9/19/96	<20	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2
	12/18/96	<20	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-8S	07/13/89	-	-	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/15/91	-	-	-	-	-	-	-	-	-	-	-
*06/17/92	<150/<300	<20	<20	40	<20	<20	<20	<20	<20	<20	<20	<20
09/23/92	<100	<20	<20	30	<20	<20	<20	<20	<20	<20	<20	<20
12/08/92	<100	<20	<20	<5	<10	<5	<2	<5	<2	<2	<2	<2
03/17/93	<10	<2	<20	<100	<20	<40	<20	<20	<20	<20	<20	<20
06/08/93	<400	<20	<20	<40	<20	<40	<20	<20	<20	<20	<20	<20
08/25/93	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20	<20
11/19/96	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20	<20
2/24/94	<400	<20	<20	<120	<40	<200	<40	<40	<40	<40	<40	<40
6/13/94	<800	<120	<150	<50	<250	<50	<100	<50	<50	<50	<50	<50
9/9/94	<1000	<400	<40	<100	<20	<40	<20	<20	<20	<20	<20	<20
12/22/94	<800	<80	<40	<200	<40	<80	<40	<40	<40	<40	<40	<40
3/14/95	<800	<80	<40	<200	<40	<80	<40	<40	<40	<40	<40	<40
6/13/95	<800	<40	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
9/7/95	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
12/15/95	<40/<40	<40/<40	<20/<20	<20/<20	<5	<5	<5	<5	<5	<5	<5	<5
*3/01/96	<10	<5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
6/7/96	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
9/19/96												
12/18/96												

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-9S	10/06/89	-	-	-	-	-	-	-	-	-	-	-
	11/19/91	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	06/15/92	<30	<1	<1	10	<1	<1	<1	<1	<1	<1	<1
	09/21/92	<5	<1	<1	3	<1	<1	<1	<1	<1	<1	<1
	12/07/92	<5	<1	<1	<5	<10	<5	<2	<2	<2	<2	<2
	03/16/93	<10	<2	<2	<4/<4	<2/<2	<4/<4	<2/<2	<2/<2	<2	<2	<2
	*06/07/93	<40/<40	<40/<40	<2/<2	<2	<4	<2	<4	<2	<2	<2	<2
	08/24/93	<40	<2	<2	<2	<10	<2	<4	<2	<2	<2	<2
	11/18/93	<40	<2	<2	<2	<10	<2	<4	<2	<2	<2	<2
	2/23/94	<40	<4	<2	<2	<10	<2	<4	<2	<2	<2	<2
	6/10/94	<40	<6	<2	<20	<2	<2	<4	<2	<2	<2	<2
	9/8/94	<40	<6	<2	<10	<2	<4	<2	<2	<2	<2	<2
	*12/21/94	<40/<40	<4/<4	<2/<2	<10/<10	<2/<2	<4/<4	<2/<2	<2/<2	<2	<2	<2
	3/13/95	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	*6/12/95	<40/<40	<2/<2	<2/<2	<10/<10	<2/<2	<4/<4	<2/<2	<2/<2	<2	<2	<2
	9/6/95	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	12/12/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
	2/29/96	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6/6/96	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
	9/18/96	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	12/17/96	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
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TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylbenzene
WCC-11S	11/15/91	-	-	-	-	-	-	-	-	-	-	-
	06/16/92	<10	-	-	-	<1	<1	<1	<1	<1	<1	<1
	09/21/92	<5	<1	2	9	<1	<1	<1	<1	<1	<1	<1
	12/08/92	<5	<1	<1	4	<1	<1	<2	<2	<2	<2	<2
	03/16/93	<10	<2	<5	<10	<5	<2	<4	<2	<2	<2	<2
	06/07/93	<40	<2	<2	<4	<2	<4	<4	<2	<2	<2	<2
	08/24/93	<40	<2	<2	<4	<2	<4	<4	<2	<2	<2	<2
	*11/19/93	<40/<40	<2/<2	<2/<4	<10/<10	<2/<2	<4/<4	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2
	2/23/94	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	6/10/94	<40	<6	<2	<20	<2	<4	<2	<2	<2	<2	<2
	*9/8/94	<40/<40	<6/<6	<2/<2	<10/<10	<2/<2	<4/<4	<2/<2	<2/<2	<2/<2	<2/<2	<2/<2
	12/21/94	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	3/13/95	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2
	6/12/95	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2
	*9/6/95	<10/<10	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5
	12/15/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
	3/19/96	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
	*6/6/96	<10/<10	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5	<5/<5
	9/19/96	<50	<5	<2	<2	<2	<2	<2	<10	<5	<5	<5
	12/18/96	<20	<2						<2	<2	<2	<2

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
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TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
 GROUNDWATER MONITORING DATA SUMMARY REPORT
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8260 - All results in ug/l.

WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
DAC-P1	10/09/89	<1,000	-	-	-	-	-	-	-	-	-	-
	6/17/92	<30	<1/<1	1/1	4/4	9/9	13/13	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1
	*6/23/92	<5/<5	<500	<500	2,000	<500	<500	<500	<500	<500	<500	<500
	12/09/92	<3,000	<10	<2	<5	<10	5	10	<5	<2	<2	<2
	03/18/93	<10	<2,000	<100	<200	<100	<200	<100	<100	<100	<100	<100
	06/08/93	<4,000	<4,000	<200	<200	<400	<200	<400	<200	<200	<200	<200
	08/25/93	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20
	11/19/93	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20
	2/24/94	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20
	6/13/94	<400	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20
	9/9/94	<4000	<600	<200	<1000	<200	<400	<200	<200	<200	<200	<200
	12/22/94	<4,000	<400	<200	<1,000	<200	<400	<200	<200	<200	<200	<200
	3/14/95	<4,000	<400	<200	<1,000	<200	<400	<200	<200	<200	<200	<200
	6/13/95	<4,000	<200	<200	<1,000	<200	<400	<200	<200	<200	<200	<200
	9/7/95	<10	<5	<5	<5	<5	4	11	<2	<2	<2	<2
	12/16/95	<2	<4	<2	<2	<2	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100	<100/<100
	*3/04/96	<200/<200	<100/<100	<50/<25	<50/<25	<50/<25	<50/<25	<50/<25	<50/<25	<50/<25	<50/<25	<50/<25
	*6/7/96	<100/<50	<250	<250	<250	<500	<500	<500	<500	<500	<500	<500
	9/19/96	<2500	<5,000	<500	<500	<500	<500	<500	<500	<500	<500	<500
	12/19/96											

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.

WELL ID.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-1D	07/25/89	-	-	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/15/91	-	-	-	-	-	-	-	-	-	-	-
*06/15/92	<50<50	-	-	-	-	-	-	-	-	-	-	-
09/22/92	<5	<1	4	11	<1	<1	<1	<1	<1	<1	<1	<1
*12/07/92	<5/<5	<1/<1	<1/<1	2/2	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1
03/16/93	<10	<2	<5	<10	<5	<2	<2	<5	<2	<2	<2	<2
*06/08/93	<200/<80	<10<4	<10<4	<20<10	<10<4	<20<8	<10<4	<10<4	<10<4	<10<4	<10<4	<10<4
08/24/93	<40	<2	<4	<4	<2	<4	<2	<2	<2	<2	<2	<2
11/18/93	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2	<2
2/23/94	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2	<2
6/10/94	<40	<6	<2	<20	<2	<4	<2	<2	<2	<2	<2	<2
9/8/94	<40	<6	<2	<10	<2	<4	<2	<2	<2	<2	<2	<2
12/22/94	<40	<4	<2	<10	<2	<4	<2	<2	<2	<2	<2	<2
3/13/95	<80	<8	<4	<20	<4	<8	<4	<4	<4	<4	<4	<4
6/13/95	<40	<2	<2	<10	<2	<4	<2	<2	<2	<2	<2	<2
9/3/95	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
12/16/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
*2/29/96	<10<10	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5	<5<5
6/6/96	<10	<5	<5	<1/<1	<1/<1	<5	<5	<5	<5	<5	<5	<5
*9/18/96	<10<10	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/18/96	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA - MINOR CONSTITUENTS
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

COMPOUNDS DETECTED BY EPA METHOD 8240 OR EPA METHOD 8240/8260 - All results in ug/l.												
WELL I.D.	SAMPLE DATE	Acetone	Total Xylenes	Trichloro-fluoromethane	Methylene Chloride	Carbon Tetrachloride	1,1,2-TCA	PCE	Carbon Disulfide	Ethy-Benzene	1,2-DCA	1-Methylethylbenzene
WCC-3D	07/25/89	-	-	-	-	-	-	-	-	-	-	-
	08/23/89	-	-	-	-	-	-	-	-	-	-	-
	11/14/91	-	-	-	-	-	-	-	-	-	-	-
	06/16/92	<30	-	-	-	-	-	-	-	-	-	<1
	09/22/92	<5	<1	1	8	>1	<1	<1	<1	<1	<1	<1
	12/07/92	<5	<1	<1	<1	<5<5	<2>2	<2>2	<2>2	<2>2	<2>2	<2>2
	*03/16/93	<10<10	<2>2	<5>5	<10<10	<4	<4	<2	<2	<2	<2	<2
	06/08/93	<40	<2	<2	<4	<2	<4	<2	<2	<2	<2	<2
	08/24/93	<40	<2	<2	<4	<2	<4	<2	<2	<2	<2	<2
	*11/18/93	<40<80	<2>4	<2>4	<10<20	<2>4	<4>8	<2>4	<2>4	<2>4	<2>4	<2>4
	2/23/94	<80	<4	<4	<20	<4	<8	<4	<4	<4	<4	<4
	6/13/94	<200	<30	<10	<50	<10	<20	<10	<10	<10	<10	<10
	9/9/94	<1000	<150	<50	<250	<50	<100	<50	<50	<50	<50	<50
	12/21/94	<80	<8	<4	<20	<4	29	<4	<4	<4	<4	<4
	*3/14/95	<800<400	<80<40	<40<20	<200<100	<40<20	<80<40	<40/61	<40<20	<40<20	<40<20	<40<20
	6/13/95	<200	<10	<10	<50	<10	<20	<10	<10	<10	<10	<10
	9/7/95	<10	8	<5	<5	35	<5	<5	<5	<5	6	<5
	12/16/95	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
	3/04/96	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6/7/96	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	9/7/96	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	12/19/96	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.1

Notes:
 ug/l = micrograms per liter
 PCE = Tetrachloroethene
 1,1,2-TCA=1,1,2-Trichloroethane
 1,2-DCA = 1,2-Dichloroethane

TABLE 4
 SUMMARY OF GROUNDWATER ELEVATION DATA
 FOURTH QUARTER, 1996
 DOUGLAS AIRCRAFT C-6 FACILITY
 TORRANCE, CALIFORNIA
 KJ 944016.02

Observation Well	Reference Point ¹ Elevation (Feet Above MSL) ²	Water Level Elevation (Feet Above Mean Sea Level)									
		9/8/94	12/21/94	3/13/95	6/12/95	9/20/95	12/12/95	2/29/96	6/6/96	9/18/96	12/18/96
WCC-1S	50.7	-17.25	-17.12	-17.12	-16.53	-16.05	-15.80	-15.47	-15.36	-15.03	
WCC-2S	50.59	-17.2	-17.17	-17.08	-16.37	-16.19	-15.86	-15.77	-15.26	-15.18	-14.82
WCC-3S	51.19	-17.31	-17.28	-17.22	-16.58	-16.37	-16.06	-15.93	-15.41	-15.41	-15.11
WCC-4S	49.69	-17.37	-17.31	-17.23	-16.61	-16.38	-16.16	-17.02	-15.56	-15.49	-15.19
WCC-5S	48.22	-17.33	-17.25	-17.19	-16.56	-16.35	-16.14	-16.02	-15.54	-15.47	-15.22
WCC-6S	50.95	NM ³	-17.45	-17.36	16.75	-16.64 ⁴	-16.30	-16.17	-15.76	-15.65	-15.35
WCC-7S	48.29	-17.8	-17.74	-17.54	-17.03	-16.82	-16.59	-16.46	-16.01	-15.95	-15.64
WCC-8S	50.56	-17.14	-17.12	-17.29	-16.42	-16.16	-15.89	-15.76	-15.34	-15.27	-14.99
WCC-9S	47.01	-19.08	-17.51	-17.41	-16.79	-16.64	-16.39	-16.49	-15.86	-15.76	-15.47
WCC-10S	51.12	-17.03	-16.97	-16.56	-16.05	-15.89	-15.54	-15.22	-14.77	-14.68	NA
WCC-11S	49.97	-16.58	-16.63	-16.48	-15.83	-15.59	-15.35	-15.19	-14.71	-14.64	-14.34
WCC-12S	46.92	-17.79	-17.67	-17.63	-17.00	-16.79	-16.54	-16.40	-15.96	-15.88	-15.56
DAC-P1	52.44	-16.48	-16.25	-16.41	-15.94	-15.66	-15.66	-15.40	-15.02	-14.88	-14.67
WCC-1D	50.45	-17.66	-17.55	-17.36	-16.79	-16.60	-16.31	-16.15	-15.73	-15.65	-15.34
WCC-3D	51.18	-17.47	-17.42	-17.27	-16.67	-16.47	-16.17	-15.95	-15.57	-15.5	-15.21
MW-8 ⁵	49.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9 ⁵	48.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-18 ⁵	50.29	NA	NA	NA	NA	-18.91	NA	NA	NA	NA	NA
MW-19 ⁵	46.55	NA	NA	NA	-18.06	NA	NA	NA	NA	NA	NA

Notes:

1. Reference point is north side, top of well casing
2. Reference point elevation measured by Hargis + Associates, Inc.
3. Water Level Elevation not measured due to wellhead obstructions.
4. Well WCC-6S could not be opened on 20 September 1995. The water level elevation shown was measured on 6 September 1995.

5. Installed by Hargis + Associates, Inc. for Montrose Chemical Corporation
6. NA - Not Available

TABLE 4

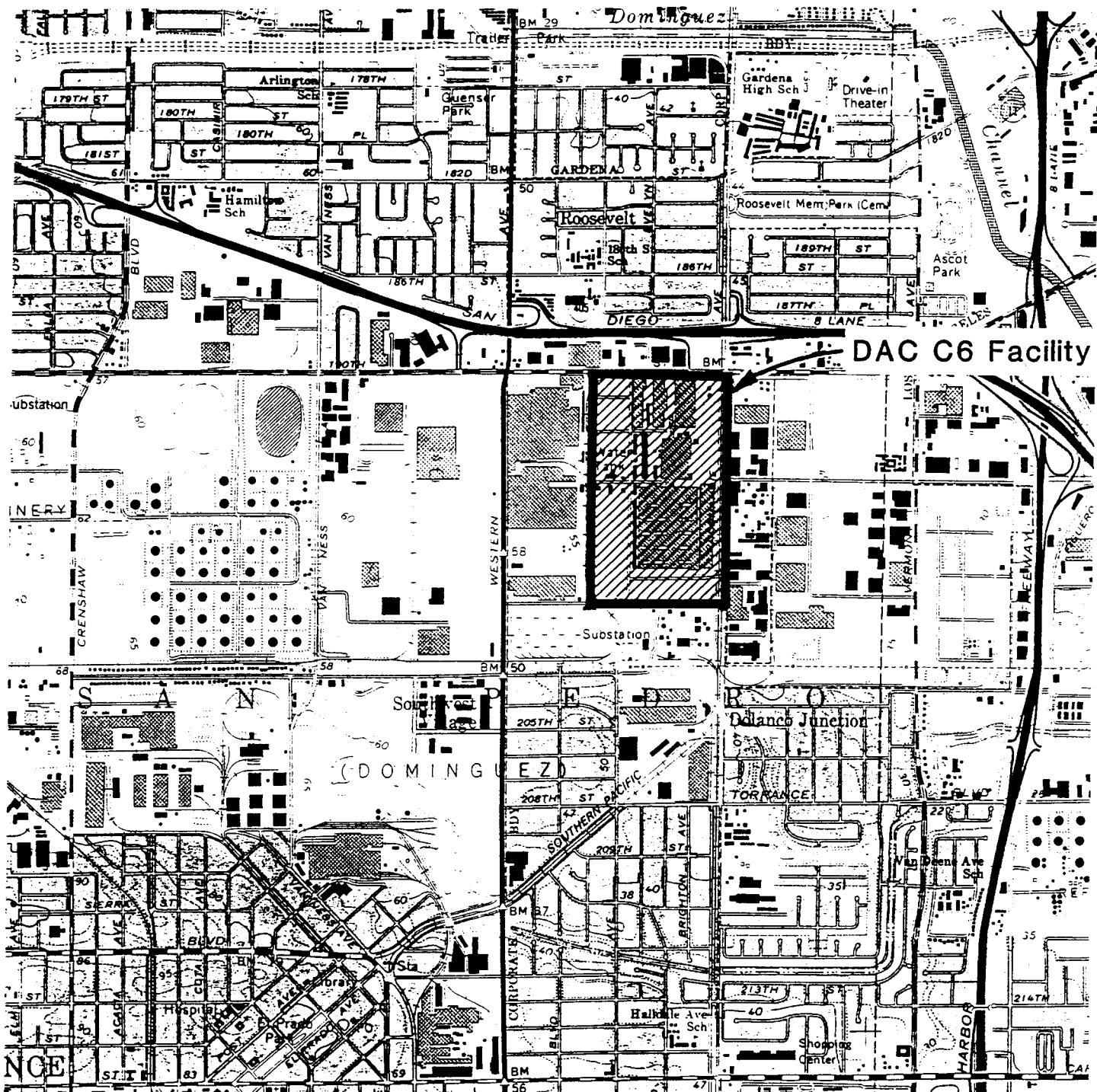
SUMMARY OF GROUNDWATER ELEVATION DATA
GROUNDWATER MONITORING DATA SUMMARY REPORT
FOURTH QUARTER, 1996
DOUGLAS AIRCRAFT C-6 FACILITY
TORRANCE, CALIFORNIA
KJ 944016.02

Observation Well	Reference Point ¹ Elevation (Feet Above MSL) ²	Water Level Elevation (Feet Above Mean Sea Level)										
		11/13/87 ³	10/18/89 ⁴	6/15/92	9/21/92	1/5/93	4/9/93	6/7/93	8/24/93	11/18/93	2/23/94	6/10/94
WCC-1S	50.7	-21.63	-19.48	-19.2	-19.42	-19.34	-18.79	-18.75	-18.25	-18	-17.61	-17.23
WCC-2S	50.59	-19.72	-19.06	-19.15	-19.41	-19.51	-18.64	-18.63	-18.15	-17.87	-17.49	-17.07
WCC-3S	51.19	-21.56	-19.42	-19.24	-19.52	-19.73	-18.83	-18.82	-18.36	-18.01	-17.67	-17.19
WCC-4S	49.69	-21.77	-19.59	-19.22	-19.49	-19.34	-18.86	-18.78	-18.37	-18.16	-17.77	-17.32
WCC-5S	48.22	NA ⁵	-19.7	-19.13	-19.42	-19.32	-18.83	-18.78	-18.38	-18.13	-17.78	-17.33
WCC-6S	50.95	NA	-19.7	-19.4	-19.64	-19.5	-19.03	-18.97	-18.56	-18.32	-17.92	-17.48
WCC-7S	48.29	NA	-20.07	-19.63	-19.93	-19.76	-19.3	-19.23	-18.83	-18.6	-18.22	-17.82
WCC-8S	50.56	NA	-19.35	-19.11	-19.34	-19.19	-18.69	-18.61	-18.19	-17.89	-17.49	-17.11
WCC-9S	47.01	NA	-20.07	-19.44	-19.66	-19.56	-19.09	-19.09	-18.69	-18.42	-18.09	-18.63
WCC-10S	51.12	NA	-18.42	-18.94	-19.33	-19.1	-18.42	-18.33	-17.83	-17.54	-17.07	-16.67
WCC-11S	49.97	NA	NA	-17.62	-18.81	-18.69	-18.13	-18.04	-17.6	-17.36	-16.96	-16.45
WCC-12S	46.92	NA	NA	-19.6	-19.9	-19.74	-19.26	-19.2	-18.78	-18.58	-18.13	-17.74
DAC-P1	52.44	NA	NA	-17.76	-17.88	-18.02	-17.46	-17.38	-17.03	-16.76	-16.74	-16.6
WCC-1D	50.45	NA	-19.51	-19.55	-19.92	-19.61	-19.1	-19	-18.53	-18.34	-17.83	-17.47
WCC-3D	51.18	NA	-19.38	-19.39	-19.71	-20.52	-18.87	-18.85	-18.4	-18.18	-18	-17.39
MW-8 ⁶	49.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9 ⁶	48.67	NA	NA	NA	NA	NA	NA	NA	-20.58	NA	NA	NA
MW-18 ⁶	50.29	NA	NA	NA	NA	NA	NA	NA	-20.88	NA	NA	NA
MW-19 ⁶	46.55	NA	NA	NA	NA	NA	NA	NA	-20.13	NA	NA	NA

Notes:

1. Reference point is north side, top of well casing.
2. Reference point elevation measured by Hargis + Associates.
3. Data taken from Woodward-Clyde Consultants Phase II Report, May 1988.
4. Data taken from Woodward-Clyde Consultants Phase III Report, May 1990.
5. NA - Not Available
6. Installed by Hargis + Associates, Inc. for Montrose Chemical Corporation.

FIGURES

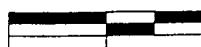


N

Kennedy/Jenks Consultants

Douglas Aircraft Company
C6 Facility

Site Vicinity Map



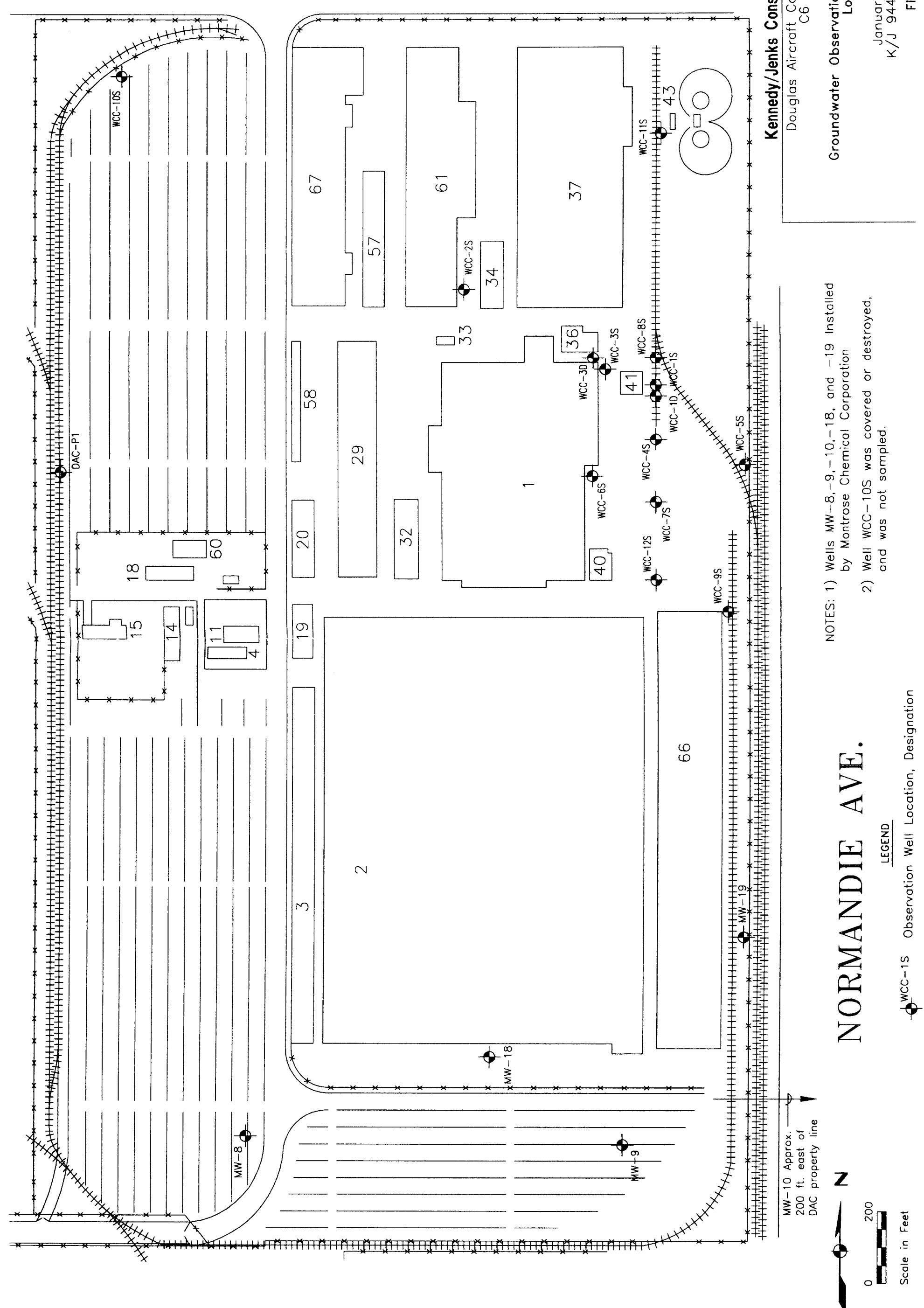
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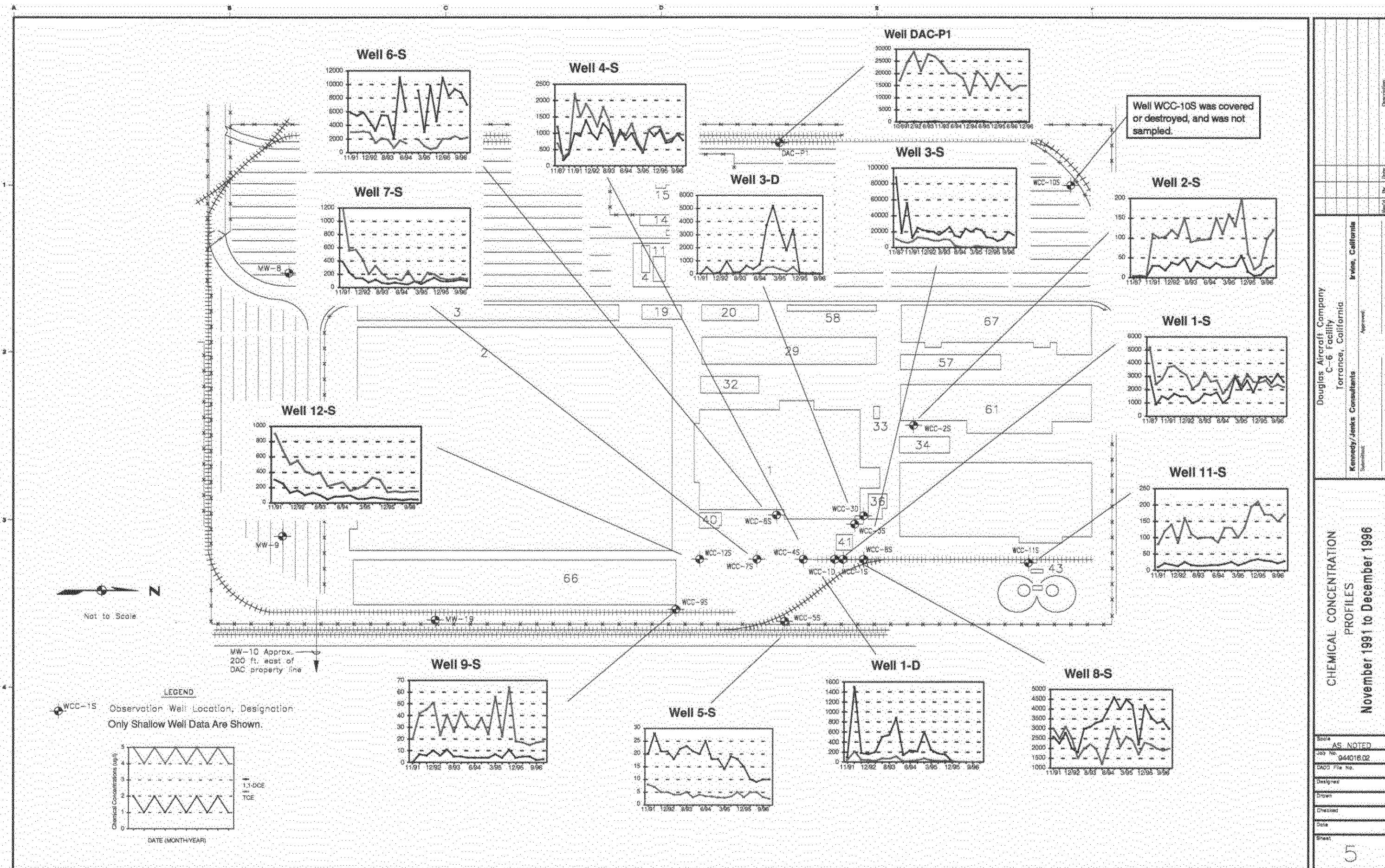
Base Map: U.S.G.S. 7.5 Minute Topographic Map,
Torrance, California Quadrangle, 1981.

January 1997
K/J 944016.02

Figure 1

190 TH. ST.





APPENDIX A
LABORATORY DATA SHEETS

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax



January 9, 1997

KENNEDY/JENKS CONSULTANTS
2151 MICHELSON DRIVE, SUITE 100
IRVINE, CA 92715
ATTN: MR. RUS PURCELL

LIMS NO.: 123721-0001/0012
DATE SAMPLED: 17/18-DEC-1996
DATE SAMPLE REC'D: 18-DEC-1996
PROJECT: McDONNELL DOUGLAS GROUNDWATER

Enclosed with this letter is the report containing the analytical results for the project specified above.

The Narrative section included in the following attachment provides a detailed description of all events that occurred during sample processing, analysis, and data review as applicable to the samples and analytical methods requested.

Report data sheets contain a list of the requested constituents measured in each test, the analytical results, and the standard reporting limits (RLs). Reporting limits are adjusted to reflect any dilution or dry weight correction, when applicable. Also provided in this report are the LIMS Report Key and the terms and abbreviations commonly used in our reports.

Preliminary data were provided on December 31, 1996 at 12:10 P.M. to Jay Knight.

The report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding the data provided in this report, please call Pat Abe at (714) 258-8610. Release of this report has been authorized by the Lab Director or the designee as demonstrated by the following signature.

Sincerely,

A handwritten signature in black ink, appearing to read "Pat Abe".

Project Manager

cc: Project File

LIMS REPORT KEY

Environmental
Services

Section	Description
Cover letter	Signature page, report narrative as applicable.
Sample Description Information	Tabulated cross-reference between the Lab ID and Client ID, including matrix, date and time sampled and the date received for all samples in the project.
Sample Analysis Results Sheets	Lists sample results, test components, reporting limits, dates prepared and analyzed and any data qualifiers. Pages are organized by test.
QC Lot Assignment Report	Cross-reference between lab IDs and applicable QC batches (DCS, LCS, SCS, Blank, MS/SD, DU)
Duplicate Control Sample Report	Percent recovery and RPD results, with acceptance limits, for the laboratory Duplicate Control Samples for each test are tabulated in this report. These are measures of accuracy and precision for each test.
Laboratory Control Sample Report	Percent recovery results for a single Laboratory Control Sample (if applicable) are tabulated in this report, with the applicable acceptance limits for each test.
Matrix Spike/Matrix Spike Duplicate Report	Percent recovery and RPD results for matrix-specific QC samples and acceptance limits, where applicable. This report can be used to assess matrix effects on an analysis.
Single Control Sample Report	A tabulation of the surrogate recoveries for the blank for organic analyses.
Method Blank Report	A summary of the results of the analysis of the method blank for each test.

List of Abbreviations and Terms

DCS	Duplicate Control Sample	MSD	Matrix Spike Duplicate
DU	Sample Duplicate	QC Run	Preparation batch
EB	Equipment Blank	QC Category	LIMS QC Category
FB	Field Blank	QC Lot	DCS batch
FD	Field Duplicate	ND	Not Detected at the reporting limit expressed
IDL	Instrument Detection Limit	QC Matrix	Matrix of the laboratory control sample (s)
LCS	Laboratory Control Sample	RL	Reporting Limit
MB	Method Blank	QC	Quality Control
MDL	Method Detection Limit	SA	Sample
MS	Matrix Spike	SD	See MSD
RPD	Relative Percent Difference	TB	Trip Blank
ppm (parts-per-million)	mg/L or mg/kg	ppb (parts-per-billion)	µg/L or µg/kg
QUAL	Qualifier flag	DIL	Dilution Factor

Refer to the Quanterra Incorporated Quality Assurance Management Plan for detailed explanations of terms summarized above.

TABLE OF CONTENTS

LIMS # 123721

Cover Letter	1
LIMS Report Key	2
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Narrative	4
Chain-of-Custody Records and Sample Description Information	
Analytical Results Summary (LIMS Report)	
A. LIMS Datasheets	
B. QC Summaries	

CASE NARRATIVE

LIMS # 123721

I. CONDITION UPON RECEIPT

The samples were not received in intact. The temperature of the cooler was 3.5°C

Sample containers were received intact. The VOA vials did not contain headspace. Sample container label did agree with the COC as to sample ID, collection date/time, and requested tests.

Samples were received in time to meet the method holding time specifications.

II. ORGANIC ANALYSES (BY METHOD: SW8260)

HOLDING TIME

All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK

All method blanks met method- and/or project-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs

All spike recovery and RPD data met method- and/or project-specific QC criteria.

MS/MSD recoveries for trichloroethene in MS Run 27 DEC 96-AC could not be calculated due to high constituent levels in the sample.

SURROGATE RECOVERIES

All surrogate spike recoveries in samples and in QC samples met method- and/or project-specific QC criteria.

CALIBRATIONS

All calibrations and calibration verifications met method- and/or project-specific QC criteria.

Chain of Custody Record



Environmental
Services

CUA-4124-1

Client
Kennedy / Tanks

Address

2151 Wickelson Dr. **Ste. 100**
Irvine **CA.** **92615**

City

Project Name

DAC

Contract/Purchase Order/Quote No.

Project Manager

Russ Purcell

Telephone Number (Area Code)/Fax Number

(714) 261-1577

Site Contact

Carrier/Waybill Number

Lab Contact

Date

12/17/96

Chain Of Custody Number

61762

Lab Number

123721

Page

1 of **1**

Analysis (Attach list if
more space is needed)

Special Instructions/
Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix	Containers & Preservatives
WCC55-17	12/17/96	1450	Aqueous Sed.	NaOH ZnAc/H HCl HNO3 H2SO4 Upters. Soil
WCC95-17	"	1602	Aqueous Sed.	X X

Traut Stand samples

Sample Disposal

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return To Client Disposal By Lab Archive For

(A fee may be assessed if samples are retained
longer than 3 months)

QC Requirements (Specify)

Turn Around Time Required
1. Received By **Jeanne Ghar** Date **12-19-96** Time **1925**
2. Received By **Jeanne Ghar** Date **12-19-96** Time **1925**
3. Received By **Jeanne Ghar** Date **12-19-96** Time **1925**

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record



Environmental
Services

QUA-4124-1

Client Address	Kennedy Tanks			Project Manager	Russ Purcell	Date	12/18/96	Chain Of Custody Number	61761
City	2151 Mickelson Dr Ste 100			Telephone Number (Area Code)/Fax Number	(714) 261-1577	Lab Number	123721	Page	1 of 1
Project Name	CA.	Zip Code	92715	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)			
Contract/Purchase Order/Quote No.									

**Special Instructions/
Conditions of Receipt**

**Containers &
Preservatives**

Uptens.
H2SO4
HNO3
HCl
NaOH
ZnAc
NaOH

Matrix

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Aqueous	Soil	Seep.	Uptens.	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH	Uptens.	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH
WCC1D-17	12/18/96	1006	X																
WCC2S-17		1107																	
WCC1S-17		1206																	
WCC1ZS-17		1308																	
WCC7S-17		1405																	
WCC8S-17		1450																	
WCC4S-17		1548																	
WCC1S-17		1650																	
DW-12188976																			
TB-1218896																			

Possible Hazard Identification	Sample Disposal
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable
<input type="checkbox"/> Corrosive	<input type="checkbox"/> Skin Irritant
<input type="checkbox"/> Oxidizer	<input type="checkbox"/> Poison B
<input type="checkbox"/> Other	<input type="checkbox"/> Unknown
<input type="checkbox"/> Return To Client	
<input checked="" type="checkbox"/> Disposal By Lab	
<input type="checkbox"/> Archive For	
<input type="checkbox"/> Months longer than 3 months	

QC Requirements (Specify)

Turn Around Time Required	1. Received By	Date	Time
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	12/18/96	1925
2. Relinquished By	<input checked="" type="checkbox"/> 7 Days		
<input checked="" type="checkbox"/> Relinquished By	<input type="checkbox"/> 14 Days		
	<input type="checkbox"/> 21 Days		
3. Relinquished By	<input type="checkbox"/> Other		

Date	Time
12-18-96	1925
Date	Time
Date	Time

Comments



Environmental
Services

SAMPLE DESCRIPTION INFORMATION
for
Kennedy/Jenks Consultants

Lab ID	Client ID	Matrix	Sampled Date	Received Time	Received Date
123721-0001-SA	WCC5S-17	WATER	17 DEC 96	14:50	18 DEC 96
123721-0002-SA	WCC9S-17	WATER	17 DEC 96	16:02	18 DEC 96
123721-0003-SA	WCC1D-17	WATER	18 DEC 96	10:06	18 DEC 96
123721-0004-SA	WCC2S-17	WATER	18 DEC 96	11:07	18 DEC 96
123721-0005-SA	WCC11S-17	WATER	18 DEC 96	12:06	18 DEC 96
123721-0006-SA	WCC12S-17	WATER	18 DEC 96	13:08	18 DEC 96
123721-0007-SA	WCC7S-17	WATER	18 DEC 96	14:05	18 DEC 96
123721-0008-SA	WCC8S-17	WATER	18 DEC 96	14:50	18 DEC 96
123721-0009-SA	WCC4S-17	WATER	18 DEC 96	15:48	18 DEC 96
123721-0010-SA	WCC1S-17	WATER	18 DEC 96	16:50	18 DEC 96
123721-0011-SA	DW-121896	WATER	18 DEC 96		18 DEC 96
123721-0012-TB	TB-121896	WATER-QA	18 DEC 96		18 DEC 96



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC5S-17
LAB ID: 123721-0001-SA
Matrix: WATER Sampled: 17 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	1.0	ug/L	
Chloromethane	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
Bromomethane	ND	1.0	ug/L	
Chloroethane	ND	1.0	ug/L	
Trichlorofluoromethane	ND	1.0	ug/L	
1,1-Dichloroethene	10	1.0	ug/L	
Methylene chloride	ND	1.0	ug/L	
trans-1,2-Dichloroethene	ND	1.0	ug/L	
1,1-Dichloroethane	ND	1.0	ug/L	
2,2-Dichloropropane	ND	1.0	ug/L	
cis-1,2-Dichloroethene	ND	1.0	ug/L	
Chloroform	ND	1.0	ug/L	
Bromochloromethane	ND	1.0	ug/L	
1,1,1-Trichloroethane	ND	1.0	ug/L	
1,1-Dichloropropene	ND	1.0	ug/L	
Carbon tetrachloride	ND	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
Benzene	ND	1.0	ug/L	
Trichloroethene	2.4	1.0	ug/L	
1,2-Dichloropropane	ND	1.0	ug/L	
Bromodichloromethane	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
Toluene	ND	1.0	ug/L	
1,1,2-Trichloroethane	ND	1.0	ug/L	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
1,3-Dichloropropane	ND	1.0	ug/L	
Tetrachloroethene	ND	1.0	ug/L	
Dibromochloromethane	ND	1.0	ug/L	
Chlorobenzene	ND	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	
Ethylbenzene	ND	1.0	ug/L	
Xylenes (total)	ND	1.0	ug/L	
Styrene	ND	1.0	ug/L	
Bromoform	ND	1.0	ug/L	
1-Methylethylbenzene	2.0	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
n-Propylbenzene	ND	1.0	ug/L	
Bromobenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
tert-Butylbenzene	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	

ND = Not Detected



Environmental Services
(cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC5S-17
LAB ID: 123721-0001-SA
Matrix: WATER Sampled: 17 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	1.0	ug/L	
Isopropyltoluene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
n-Butylbenzene	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,2-Dibromo-3-chloro-propane (DBCP)	ND	1.0	ug/L	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
Acetone	ND	10	ug/L	
2-Butanone	ND	10	ug/L	
4-Methyl-2-pentanone	ND	10	ug/L	
2-Hexanone	ND	10	ug/L	
Carbon disulfide	ND	5.0	ug/L	
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	107	%	80	- 120
Toluene-d8	99	%	88	- 110
Bromofluorobenzene	94	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC9S-17
LAB ID: 123721-0002-SA
Matrix: WATER Sampled: 17 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		1.0	ug/L
Chloromethane	ND		1.0	ug/L
Vinyl chloride	ND		1.0	ug/L
Bromomethane	ND		1.0	ug/L
Chloroethane	ND		1.0	ug/L
Trichlorofluoromethane	ND		1.0	ug/L
1,1-Dichloroethene	2.8		1.0	ug/L
Methylene chloride	ND		1.0	ug/L
trans-1,2-Dichloroethene	ND		1.0	ug/L
1,1-Dichloroethane	ND		1.0	ug/L
2,2-Dichloropropane	ND		1.0	ug/L
cis-1,2-Dichloroethene	2.8		1.0	ug/L
Chloroform	3.5		1.0	ug/L
Bromochloromethane	ND		1.0	ug/L
1,1,1-Trichloroethane	ND		1.0	ug/L
1,1-Dichloropropene	ND		1.0	ug/L
Carbon tetrachloride	ND		1.0	ug/L
1,2-Dichloroethane	ND		1.0	ug/L
Benzene	ND		1.0	ug/L
Trichloroethene	18		1.0	ug/L
1,2-Dichloropropane	ND		1.0	ug/L
Bromodichloromethane	ND		1.0	ug/L
Dibromomethane	ND		1.0	ug/L
Toluene	ND		1.0	ug/L
1,1,2-Trichloroethane	ND		1.0	ug/L
1,2-Dibromoethane (EDB)	ND		1.0	ug/L
1,3-Dichloropropane	ND		1.0	ug/L
Tetrachloroethene	ND		1.0	ug/L
Dibromochloromethane	ND		1.0	ug/L
Chlorobenzene	ND		1.0	ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L
Ethylbenzene	ND		1.0	ug/L
Xylenes (total)	ND		1.0	ug/L
Styrene	ND		1.0	ug/L
Bromoform	ND		1.0	ug/L
1-Methylethylbenzene	1.5		1.0	ug/L
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L
1,2,3-Trichloropropane	ND		1.0	ug/L
n-Propylbenzene	ND		1.0	ug/L
Bromobenzene	ND		1.0	ug/L
1,3,5-Trimethylbenzene	ND		1.0	ug/L
2-Chlorotoluene	ND		1.0	ug/L
4-Chlorotoluene	ND		1.0	ug/L
tert-Butylbenzene	ND		1.0	ug/L
1,2,4-Trimethylbenzene	ND		1.0	ug/L

ND = Not Detected



Environmental (cont.)
Services

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC9S-17
LAB ID: 123721-0002-SA
Matrix: WATER Sampled: 17 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		1.0	ug/L
Isopropyltoluene	ND		1.0	ug/L
1,3-Dichlorobenzene	ND		1.0	ug/L
1,4-Dichlorobenzene	ND		1.0	ug/L
n-Butylbenzene	ND		1.0	ug/L
1,2-Dichlorobenzene	ND		1.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		1.0	ug/L
1,2,4-Trichlorobenzene	ND		1.0	ug/L
Hexachlorobutadiene	ND		1.0	ug/L
Naphthalene	ND		1.0	ug/L
1,2,3-Trichlorobenzene	ND		1.0	ug/L
Acetone	ND	10		ug/L
2-Butanone	ND	10		ug/L
4-Methyl-2-pentanone	ND	10		ug/L
2-Hexanone	ND	10		ug/L
Carbon disulfide	ND	5.0		ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	111	%	80	- 120
Toluene-d8	103	%	88	- 110
Bromofluorobenzene	99	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC1D-17
LAB ID: 123721-0003-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		1.0	ug/L
Chloromethane	ND		1.0	ug/L
Vinyl chloride	ND		1.0	ug/L
Bromomethane	ND		1.0	ug/L
Chloroethane	ND		1.0	ug/L
Trichlorofluoromethane	ND		1.0	ug/L
1,1-Dichloroethene	ND		1.0	ug/L
Methylene chloride	ND		1.0	ug/L
trans-1,2-Dichloroethene	ND		1.0	ug/L
1,1-Dichloroethane	ND		1.0	ug/L
2,2-Dichloropropane	ND		1.0	ug/L
cis-1,2-Dichloroethene	1.4		1.0	ug/L
Chloroform	ND		1.0	ug/L
Bromochloromethane	ND		1.0	ug/L
1,1,1-Trichloroethane	ND		1.0	ug/L
1,1-Dichloropropene	ND		1.0	ug/L
Carbon tetrachloride	ND		1.0	ug/L
1,2-Dichloroethane	ND		1.0	ug/L
Benzene	ND		1.0	ug/L
Trichloroethene	3.5		1.0	ug/L
1,2-Dichloropropane	ND		1.0	ug/L
Bromodichloromethane	ND		1.0	ug/L
Dibromomethane	ND		1.0	ug/L
Toluene	ND		1.0	ug/L
1,1,2-Trichloroethane	ND		1.0	ug/L
1,2-Dibromoethane (EDB)	ND		1.0	ug/L
1,3-Dichloropropane	ND		1.0	ug/L
Tetrachloroethene	ND		1.0	ug/L
Dibromochloromethane	ND		1.0	ug/L
Chlorobenzene	ND		1.0	ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L
Ethylbenzene	ND		1.0	ug/L
Xylenes (total)	ND		1.0	ug/L
Styrene	ND		1.0	ug/L
Bromoform	ND		1.0	ug/L
1-Methylethylbenzene	1.2		1.0	ug/L
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L
1,2,3-Trichloropropane	ND		1.0	ug/L
n-Propylbenzene	ND		1.0	ug/L
Bromobenzene	ND		1.0	ug/L
1,3,5-Trimethylbenzene	ND		1.0	ug/L
2-Chlorotoluene	ND		1.0	ug/L
4-Chlorotoluene	ND		1.0	ug/L
tert-Butylbenzene	ND		1.0	ug/L
1,2,4-Trimethylbenzene	ND		1.0	ug/L

ND = Not Detected



Environmental (cont.)
Services

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC1D-17
LAB ID: 123721-0003-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	1.0	ug/L	
Isopropyltoluene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
n-Butylbenzene	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,2-Dibromo-3-chloro- propane (DBCP)	ND	1.0	ug/L	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
Acetone	ND	10	ug/L	
2-Butanone	ND	10	ug/L	
4-Methyl-2-pentanone	ND	10	ug/L	
2-Hexanone	ND	10	ug/L	
Carbon disulfide	ND	5.0	ug/L	
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	110	%	80 - 120	
Toluene-d8	101	%	88 - 110	
Bromofluorobenzene	96	%	86 - 115	

ND = Not Detected



Volatile Organic Compounds
Method 8260

*Environmental
Services*

Client Name: Kennedy/Jenks Consultants
Client ID: WCC2S-17
LAB ID: 123721-0004-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ug/L
Chloromethane	ND		2.0	ug/L
Vinyl chloride	ND		2.0	ug/L
Bromomethane	ND		2.0	ug/L
Chloroethane	ND		2.0	ug/L
Trichlorodifluoromethane	ND		2.0	ug/L
1,1-Dichloroethene	30		2.0	ug/L
Methylene chloride	ND		2.0	ug/L
trans-1,2-Dichloroethene	ND		2.0	ug/L
1,1-Dichloroethane	ND		2.0	ug/L
2,2-Dichloropropane	ND		2.0	ug/L
cis-1,2-Dichloroethene	2.2		2.0	ug/L
Chloroform	ND		2.0	ug/L
Bromoform	ND		2.0	ug/L
Bromochloromethane	ND		2.0	ug/L
1,1,1-Trichloroethane	ND		2.0	ug/L
1,1-Dichloropropene	ND		2.0	ug/L
Carbon tetrachloride	ND		2.0	ug/L
1,2-Dichloroethane	ND		2.0	ug/L
Benzene	ND		2.0	ug/L
Trichloroethene	120		2.0	ug/L
1,2-Dichloropropane	ND		2.0	ug/L
Bromodichloromethane	ND		2.0	ug/L
Dibromomethane	ND		2.0	ug/L
Toluene	ND		2.0	ug/L
1,1,2-Trichloroethane	ND		2.0	ug/L
1,2-Dibromoethane (EDB)	ND		2.0	ug/L
1,3-Dichloropropane	ND		2.0	ug/L
Tetrachloroethene	ND		2.0	ug/L
Dibromochloromethane	ND		2.0	ug/L
Chlorobenzene	ND		2.0	ug/L
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L
Ethylbenzene	ND		2.0	ug/L
Xylenes (total)	ND		2.0	ug/L
Styrene	ND		2.0	ug/L
Bromoform	ND		2.0	ug/L
1-Methylethylbenzene	ND		2.0	ug/L
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L
1,2,3-Trichloropropane	ND		2.0	ug/L
n-Propylbenzene	ND		2.0	ug/L
Bromobenzene	ND		2.0	ug/L
1,3,5-Trimethylbenzene	ND		2.0	ug/L
2-Chlorotoluene	ND		2.0	ug/L
4-Chlorotoluene	ND		2.0	ug/L
tert-Butylbenzene	ND		2.0	ug/L
1,2,4-Trimethylbenzene	ND		2.0	ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC2S-17
LAB ID: 123721-0004-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		2.0	ug/L
Isopropyltoluene	ND		2.0	ug/L
1,3-Dichlorobenzene	ND		2.0	ug/L
1,4-Dichlorobenzene	ND		2.0	ug/L
n-Butylbenzene	ND		2.0	ug/L
1,2-Dichlorobenzene	ND		2.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		2.0	ug/L
1,2,4-Trichlorobenzene	ND		2.0	ug/L
Hexachlorobutadiene	ND		2.0	ug/L
Naphthalene	ND		2.0	ug/L
1,2,3-Trichlorobenzene	ND		2.0	ug/L
Acetone	ND		20	ug/L
2-Butanone	ND		20	ug/L
4-Methyl-2-pentanone	ND		20	ug/L
2-Hexanone	ND		20	ug/L
Carbon disulfide	ND		10	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	97	%	80	- 120
Toluene-d8	98	%	88	- 110
Bromofluorobenzene	93	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC11S-17
LAB ID: 123721-0005-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ug/L
Chloromethane	ND		2.0	ug/L
Vinyl chloride	ND		2.0	ug/L
Bromomethane	ND		2.0	ug/L
Chloroethane	ND		2.0	ug/L
Trichlorofluoromethane	ND		2.0	ug/L
1,1-Dichloroethene	28		2.0	ug/L
Methylene chloride	ND		2.0	ug/L
trans-1,2-Dichloroethene	ND		2.0	ug/L
1,1-Dichloroethane	ND		2.0	ug/L
2,2-Dichloropropane	ND		2.0	ug/L
cis-1,2-Dichloroethene	6.1		2.0	ug/L
Chloroform	ND		2.0	ug/L
Bromochloromethane	ND		2.0	ug/L
1,1,1-Trichloroethane	ND		2.0	ug/L
1,1-Dichloropropene	ND		2.0	ug/L
Carbon tetrachloride	ND		2.0	ug/L
1,2-Dichloroethane	ND		2.0	ug/L
Benzene	ND		2.0	ug/L
Trichloroethene	170		2.0	ug/L
1,2-Dichloropropane	ND		2.0	ug/L
Bromodichloromethane	ND		2.0	ug/L
Dibromomethane	ND		2.0	ug/L
Toluene	ND		2.0	ug/L
1,1,2-Trichloroethane	ND		2.0	ug/L
1,2-Dibromoethane (EDB)	ND		2.0	ug/L
1,3-Dichloropropane	ND		2.0	ug/L
Tetrachloroethene	ND		2.0	ug/L
Dibromochloromethane	ND		2.0	ug/L
Chlorobenzene	ND		2.0	ug/L
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L
Ethylbenzene	ND		2.0	ug/L
Xylenes (total)	ND		2.0	ug/L
Styrene	ND		2.0	ug/L
Bromoform	ND		2.0	ug/L
1-Methylethylbenzene	ND		2.0	ug/L
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L
1,2,3-Trichloropropane	ND		2.0	ug/L
n-Propylbenzene	ND		2.0	ug/L
Bromobenzene	ND		2.0	ug/L
1,3,5-Trimethylbenzene	ND		2.0	ug/L
2-Chlorotoluene	ND		2.0	ug/L
4-Chlorotoluene	ND		2.0	ug/L
tert-Butylbenzene	ND		2.0	ug/L
1,2,4-Trimethylbenzene	ND		2.0	ug/L

ND = Not Detected



Environmental (cont.)
Services

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC11S-17
LAB ID: 123721-0005-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		2.0	ug/L
Isopropyltoluene	ND		2.0	ug/L
1,3-Dichlorobenzene	ND		2.0	ug/L
1,4-Dichlorobenzene	ND		2.0	ug/L
n-Butylbenzene	ND		2.0	ug/L
1,2-Dichlorobenzene	ND		2.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		2.0	ug/L
1,2,4-Trichlorobenzene	ND		2.0	ug/L
Hexachlorobutadiene	ND		2.0	ug/L
Naphthalene	ND		2.0	ug/L
1,2,3-Trichlorobenzene	ND		2.0	ug/L
Acetone	ND		20	ug/L
2-Butanone	ND		20	ug/L
4-Methyl-2-pentanone	ND		20	ug/L
2-Hexanone	ND		20	ug/L
Carbon disulfide	ND		10	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	111	%	80	- 120
Toluene-d8	101	%	88	- 110
Bromofluorobenzene	97	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC12S-17
LAB ID: 123721-0006-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ug/L
Chloromethane	ND		2.0	ug/L
Vinyl chloride	ND		2.0	ug/L
Bromomethane	ND		2.0	ug/L
Chloroethane	ND		2.0	ug/L
Trichlorofluoromethane	ND		2.0	ug/L
1,1-Dichloroethene	43		2.0	ug/L
Methylene chloride	ND		2.0	ug/L
trans-1,2-Dichloroethene	ND		2.0	ug/L
1,1-Dichloroethane	16		2.0	ug/L
2,2-Dichloropropane	ND		2.0	ug/L
cis-1,2-Dichloroethene	2.5		2.0	ug/L
Chloroform	2.0		2.0	ug/L
Bromoform	ND		2.0	ug/L
1,1,1-Trichloroethane	ND		2.0	ug/L
1,1-Dichloropropene	ND		2.0	ug/L
Carbon tetrachloride	ND		2.0	ug/L
1,2-Dichloroethane	ND		2.0	ug/L
Benzene	ND		2.0	ug/L
Trichloroethene	150		2.0	ug/L
1,2-Dichloropropane	ND		2.0	ug/L
Bromodichloromethane	ND		2.0	ug/L
Dibromomethane	ND		2.0	ug/L
Toluene	ND		2.0	ug/L
1,1,2-Trichloroethane	ND		2.0	ug/L
1,2-Dibromoethane (EDB)	ND		2.0	ug/L
1,3-Dichloropropane	ND		2.0	ug/L
Tetrachloroethene	ND		2.0	ug/L
Dibromochloromethane	ND		2.0	ug/L
Chlorobenzene	ND		2.0	ug/L
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L
Ethylbenzene	ND		2.0	ug/L
Xylenes (total)	ND		2.0	ug/L
Styrene	ND		2.0	ug/L
Bromoform	ND		2.0	ug/L
1-Methylethylbenzene	ND		2.0	ug/L
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L
1,2,3-Trichloropropane	ND		2.0	ug/L
n-Propylbenzene	ND		2.0	ug/L
Bromobenzene	ND		2.0	ug/L
1,3,5-Trimethylbenzene	ND		2.0	ug/L
2-Chlorotoluene	ND		2.0	ug/L
4-Chlorotoluene	ND		2.0	ug/L
tert-Butylbenzene	ND		2.0	ug/L
1,2,4-Trimethylbenzene	ND		2.0	ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants

Client ID: WCC12S-17

LAB ID: 123721-0006-SA

Matrix: WATER

Sampled: 18 DEC 96

Received: 18 DEC 96

Authorized: 19 DEC 96

Prepared: 27 DEC 96

Analyzed: 27 DEC 96

Instrument: GC/MS-MC

Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		2.0	ug/L
Isopropyltoluene	ND		2.0	ug/L
1,3-Dichlorobenzene	ND		2.0	ug/L
1,4-Dichlorobenzene	ND		2.0	ug/L
n-Butylbenzene	ND		2.0	ug/L
1,2-Dichlorobenzene	ND		2.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		2.0	ug/L
1,2,4-Trichlorobenzene	ND		2.0	ug/L
Hexachlorobutadiene	ND		2.0	ug/L
Naphthalene	ND		2.0	ug/L
1,2,3-Trichlorobenzene	ND		2.0	ug/L
Acetone	ND		20	ug/L
2-Butanone	ND		20	ug/L
4-Methyl-2-pentanone	ND		20	ug/L
2-Hexanone	ND		20	ug/L
Carbon disulfide	ND		10	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	109	%	80	- 120
Toluene-d8	99	%	88	- 110
Bromofluorobenzene	95	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC7S-17
LAB ID: 123721-0007-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	2.0		ug/L
Chloromethane	ND	2.0		ug/L
Vinyl chloride	ND	2.0		ug/L
Bromomethane	ND	2.0		ug/L
Chloroethane	ND	2.0		ug/L
Trichlorofluoromethane	ND	2.0		ug/L
1,1-Dichloroethene	99	2.0		ug/L
Methylene chloride	ND	2.0		ug/L
trans-1,2-Dichloroethene	ND	2.0		ug/L
1,1-Dichloroethane	ND	2.0		ug/L
2,2-Dichloropropane	ND	2.0		ug/L
cis-1,2-Dichloroethene	ND	2.0		ug/L
Chloroform	ND	2.0		ug/L
Bromochloromethane	ND	2.0		ug/L
1,1,1-Trichloroethane	ND	2.0		ug/L
1,1-Dichloropropene	ND	2.0		ug/L
Carbon tetrachloride	ND	2.0		ug/L
1,2-Dichloroethane	ND	2.0		ug/L
Benzene	ND	2.0		ug/L
Trichloroethene	130	2.0		ug/L
1,2-Dichloropropane	ND	2.0		ug/L
Bromodichloromethane	ND	2.0		ug/L
Dibromomethane	ND	2.0		ug/L
Toluene	ND	2.0		ug/L
1,1,2-Trichloroethane	ND	2.0		ug/L
1,2-Dibromoethane (EDB)	ND	2.0		ug/L
1,3-Dichloropropene	ND	2.0		ug/L
Tetrachloroethene	ND	2.0		ug/L
Dibromochloromethane	ND	2.0		ug/L
Chlorobenzene	ND	2.0		ug/L
1,1,1,2-Tetrachloroethane	ND	2.0		ug/L
Ethylbenzene	ND	2.0		ug/L
Xylenes (total)	ND	2.0		ug/L
Styrene	ND	2.0		ug/L
Bromoform	ND	2.0		ug/L
1-Methylethylbenzene	ND	2.0		ug/L
1,1,2,2-Tetrachloroethane	ND	2.0		ug/L
1,2,3-Trichloropropene	ND	2.0		ug/L
n-Propylbenzene	ND	2.0		ug/L
Bromobenzene	ND	2.0		ug/L
1,3,5-Trimethylbenzene	ND	2.0		ug/L
2-Chlorotoluene	ND	2.0		ug/L
4-Chlorotoluene	ND	2.0		ug/L
tert-Butylbenzene	ND	2.0		ug/L
1,2,4-Trimethylbenzene	ND	2.0		ug/L

ND = Not Detected



Environmental(cont.)
Services

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC7S-17
LAB ID: 123721-0007-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 2.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		2.0	ug/L
Isopropyltoluene	ND		2.0	ug/L
1,3-Dichlorobenzene	ND		2.0	ug/L
1,4-Dichlorobenzene	ND		2.0	ug/L
n-Butylbenzene	ND		2.0	ug/L
1,2-Dichlorobenzene	ND		2.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		2.0	ug/L
1,2,4-Trichlorobenzene	ND		2.0	ug/L
Hexachlorobutadiene	ND		2.0	ug/L
Naphthalene	ND		2.0	ug/L
1,2,3-Trichlorobenzene	ND		2.0	ug/L
Acetone	ND		20	ug/L
2-Butanone	ND		20	ug/L
4-Methyl-2-pentanone	ND		20	ug/L
2-Hexanone	ND		20	ug/L
Carbon disulfide	ND		10	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	112	%	80	- 120
Toluene-d8	100	%	88	- 110
Bromofluorobenzene	95	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC8S-17
LAB ID: 123721-0008-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	50	ug/L	
Chloromethane	ND	50	ug/L	
Vinyl chloride	ND	50	ug/L	
Bromomethane	ND	50	ug/L	
Chloroethane	ND	50	ug/L	
Trichlorofluoromethane	ND	50	ug/L	
1,1-Dichloroethene	3000	50	ug/L	
Methylene chloride	ND	50	ug/L	
trans-1,2-Dichloroethene	ND	50	ug/L	
1,1-Dichloroethane	ND	50	ug/L	
2,2-Dichloropropane	ND	50	ug/L	
cis-1,2-Dichloroethene	ND	50	ug/L	
Chloroform	ND	50	ug/L	
Bromochloromethane	ND	50	ug/L	
1,1,1-Trichloroethane	61	50	ug/L	
1,1-Dichloropropene	ND	50	ug/L	
Carbon tetrachloride	ND	50	ug/L	
1,2-Dichloroethane	ND	50	ug/L	
Benzene	ND	50	ug/L	
Trichloroethene	2000	50	ug/L	
1,2-Dichloropropane	ND	50	ug/L	
Bromodichloromethane	ND	50	ug/L	
Dibromomethane	ND	50	ug/L	
Toluene	ND	50	ug/L	
1,1,2-Trichloroethane	ND	50	ug/L	
1,2-Dibromoethane (EDB)	ND	50	ug/L	
1,3-Dichloropropene	ND	50	ug/L	
Tetrachloroethene	ND	50	ug/L	
Dibromochloromethane	ND	50	ug/L	
Chlorobenzene	ND	50	ug/L	
1,1,1,2-Tetrachloroethane	ND	50	ug/L	
Ethylbenzene	ND	50	ug/L	
Xylenes (total)	ND	50	ug/L	
Styrene	ND	50	ug/L	
Bromoform	ND	50	ug/L	
1-Methylethylbenzene	ND	50	ug/L	
1,1,2,2-Tetrachloroethane	ND	50	ug/L	
1,2,3-Trichloropropane	ND	50	ug/L	
n-Propylbenzene	ND	50	ug/L	
Bromobenzene	ND	50	ug/L	
1,3,5-Trimethylbenzene	ND	50	ug/L	
2-Chlorotoluene	ND	50	ug/L	
4-Chlorotoluene	ND	50	ug/L	
tert-Butylbenzene	ND	50	ug/L	
1,2,4-Trimethylbenzene	ND	50	ug/L	

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC8S-17
LAB ID: 123721-0008-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 27 DEC 96 Analyzed: 27 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		50	ug/L
Isopropyltoluene	ND		50	ug/L
1,3-Dichlorobenzene	ND		50	ug/L
1,4-Dichlorobenzene	ND		50	ug/L
n-Butylbenzene	ND		50	ug/L
1,2-Dichlorobenzene	ND		50	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		50	ug/L
1,2,4-Trichlorobenzene	ND		50	ug/L
Hexachlorobutadiene	ND		50	ug/L
Naphthalene	ND		50	ug/L
1,2,3-Trichlorobenzene	ND		50	ug/L
Acetone	ND		500	ug/L
2-Butanone	ND		500	ug/L
4-Methyl-2-pentanone	ND		500	ug/L
2-Hexanone	ND		500	ug/L
Carbon disulfide	ND		250	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	109	%	80	- 120
Toluene-d8	99	%	88	- 110
Bromofluorobenzene	94	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC4S-17
LAB ID: 123721-0009-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 25

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	25		ug/L
Chloromethane	ND	25		ug/L
Vinyl chloride	ND	25		ug/L
Bromomethane	ND	25		ug/L
Chloroethane	ND	25		ug/L
Trichlorofluoromethane	ND	25		ug/L
1,1-Dichloroethene	780	25		ug/L
Methylene chloride	ND	25		ug/L
trans-1,2-Dichloroethene	ND	25		ug/L
1,1-Dichloroethane	ND	25		ug/L
2,2-Dichloropropane	ND	25		ug/L
cis-1,2-Dichloroethene	ND	25		ug/L
Chloroform	ND	25		ug/L
Bromochloromethane	ND	25		ug/L
1,1,1-Trichloroethane	ND	25		ug/L
1,1-Dichloropropene	ND	25		ug/L
Carbon tetrachloride	ND	25		ug/L
1,2-Dichloroethane	ND	25		ug/L
Benzene	ND	25		ug/L
Trichloroethene	960	25		ug/L
1,2-Dichloropropane	ND	25		ug/L
Bromodichloromethane	ND	25		ug/L
Dibromomethane	ND	25		ug/L
Toluene	ND	25		ug/L
1,1,2-Trichloroethane	ND	25		ug/L
1,2-Dibromoethane (EDB)	ND	25		ug/L
1,3-Dichloropropane	ND	25		ug/L
Tetrachloroethene	ND	25		ug/L
Dibromochloromethane	ND	25		ug/L
Chlorobenzene	ND	25		ug/L
1,1,1,2-Tetrachloroethane	ND	25		ug/L
Ethylbenzene	ND	25		ug/L
Xylenes (total)	ND	25		ug/L
Styrene	ND	25		ug/L
Bromoform	ND	25		ug/L
1-Methylethylbenzene	ND	25		ug/L
1,1,2,2-Tetrachloroethane	ND	25		ug/L
1,2,3-Trichloropropane	ND	25		ug/L
n-Propylbenzene	ND	25		ug/L
Bromobenzene	ND	25		ug/L
1,3,5-Trimethylbenzene	ND	25		ug/L
2-Chlorotoluene	ND	25		ug/L
4-Chlorotoluene	ND	25		ug/L
tert-Butylbenzene	ND	25		ug/L
1,2,4-Trimethylbenzene	ND	25		ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC4S-17
LAB ID: 123721-0009-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 25

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	25		ug/L
Isopropyltoluene	ND	25		ug/L
1,3-Dichlorobenzene	ND	25		ug/L
1,4-Dichlorobenzene	ND	25		ug/L
n-Butylbenzene	ND	25		ug/L
1,2-Dichlorobenzene	ND	25		ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND	25		ug/L
1,2,4-Trichlorobenzene	ND	25		ug/L
Hexachlorobutadiene	ND	25		ug/L
Naphthalene	ND	25		ug/L
1,2,3-Trichlorobenzene	ND	25		ug/L
Acetone	ND	250		ug/L
2-Butanone	ND	250		ug/L
4-Methyl-2-pentanone	ND	250		ug/L
2-Hexanone	ND	250		ug/L
Carbon disulfide	ND	120		ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	96	%	80	- 120
Toluene-d8	97	%	88	- 110
Bromofluorobenzene	91	%	86	- 115

ND = Not Detected

Volatile Organic Compounds
Method 8260Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC1S-17
LAB ID: 123721-0010-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	50		ug/L
Chloromethane	ND	50		ug/L
Vinyl chloride	ND	50		ug/L
Bromomethane	ND	50		ug/L
Chloroethane	ND	50		ug/L
Trichlorofluoromethane	ND	50		ug/L
1,1-Dichloroethene	2600	50		ug/L
Methylene chloride	ND	50		ug/L
trans-1,2-Dichloroethene	ND	50		ug/L
1,1-Dichloroethane	ND	50		ug/L
2,2-Dichloropropane	ND	50		ug/L
cis-1,2-Dichloroethene	ND	50		ug/L
Chloroform	ND	50		ug/L
Bromoform	ND	50		ug/L
Bromochloromethane	ND	50		ug/L
1,1,1-Trichloroethane	ND	50		ug/L
1,1-Dichloropropene	ND	50		ug/L
Carbon tetrachloride	ND	50		ug/L
1,2-Dichloroethane	ND	50		ug/L
Benzene	ND	50		ug/L
Trichloroethene	2200	50		ug/L
1,2-Dichloropropane	ND	50		ug/L
Bromodichloromethane	ND	50		ug/L
Dibromomethane	ND	50		ug/L
Toluene	ND	50		ug/L
1,1,2-Trichloroethane	ND	50		ug/L
1,2-Dibromoethane (EDB)	ND	50		ug/L
1,3-Dichloropropene	ND	50		ug/L
Tetrachloroethene	ND	50		ug/L
Dibromochloromethane	ND	50		ug/L
Chlorobenzene	ND	50		ug/L
1,1,1,2-Tetrachloroethane	ND	50		ug/L
Ethylbenzene	ND	50		ug/L
Xylenes (total)	ND	50		ug/L
Styrene	ND	50		ug/L
Bromoform	ND	50		ug/L
1-Methylethylbenzene	ND	50		ug/L
1,1,2,2-Tetrachloroethane	ND	50		ug/L
1,2,3-Trichloropropane	ND	50		ug/L
n-Propylbenzene	ND	50		ug/L
Bromobenzene	ND	50		ug/L
1,3,5-Trimethylbenzene	ND	50		ug/L
2-Chlorotoluene	ND	50		ug/L
4-Chlorotoluene	ND	50		ug/L
tert-Butylbenzene	ND	50		ug/L
1,2,4-Trimethylbenzene	ND	50		ug/L

ND = Not Detected

Environmental (cont.)
ServicesVolatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC1S-17
LAB ID: 123721-0010-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		50	ug/L
Isopropyltoluene	ND		50	ug/L
1,3-Dichlorobenzene	ND		50	ug/L
1,4-Dichlorobenzene	ND		50	ug/L
n-Butylbenzene	ND		50	ug/L
1,2-Dichlorobenzene	ND		50	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		50	ug/L
1,2,4-Trichlorobenzene	ND		50	ug/L
Hexachlorobutadiene	ND		50	ug/L
Naphthalene	ND		50	ug/L
1,2,3-Trichlorobenzene	ND		50	ug/L
Acetone	ND		500	ug/L
2-Butanone	ND		500	ug/L
4-Methyl-2-pentanone	ND		500	ug/L
2-Hexanone	ND		500	ug/L
Carbon disulfide	ND		250	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	103	%	80	- 120
Toluene-d8	100	%	88	- 110
Bromofluorobenzene	93	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: DW-121896
LAB ID: 123721-0011-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	50	ug/L	
Chloromethane	ND	50	ug/L	
Vinyl chloride	ND	50	ug/L	
Bromomethane	ND	50	ug/L	
Chloroethane	ND	50	ug/L	
Trichlorodifluoromethane	ND	50	ug/L	
1,1-Dichloroethene	2600	50	ug/L	
Methylene chloride	ND	50	ug/L	
trans-1,2-Dichloroethene	ND	50	ug/L	
1,1-Dichloroethane	ND	50	ug/L	
2,2-Dichloropropane	ND	50	ug/L	
cis-1,2-Dichloroethene	ND	50	ug/L	
Chloroform	ND	50	ug/L	
Bromochloromethane	ND	50	ug/L	
1,1,1-Trichloroethane	ND	50	ug/L	
1,1-Dichloropropene	ND	50	ug/L	
Carbon tetrachloride	ND	50	ug/L	
1,2-Dichloroethane	ND	50	ug/L	
Benzene	ND	50	ug/L	
Trichloroethene	2300	50	ug/L	
1,2-Dichloropropane	ND	50	ug/L	
Bromodichloromethane	ND	50	ug/L	
Dibromomethane	ND	50	ug/L	
Toluene	ND	50	ug/L	
1,1,2-Trichloroethane	ND	50	ug/L	
1,2-Dibromoethane (EDB)	ND	50	ug/L	
1,3-Dichloropropane	ND	50	ug/L	
Tetrachloroethene	ND	50	ug/L	
Dibromochloromethane	ND	50	ug/L	
Chlorobenzene	ND	50	ug/L	
1,1,1,2-Tetrachloroethane	ND	50	ug/L	
Ethylbenzene	ND	50	ug/L	
Xylenes (total)	ND	50	ug/L	
Styrene	ND	50	ug/L	
Bromoform	ND	50	ug/L	
1-Methylethylbenzene	ND	50	ug/L	
1,1,2,2-Tetrachloroethane	ND	50	ug/L	
1,2,3-Trichloropropane	ND	50	ug/L	
n-Propylbenzene	ND	50	ug/L	
Bromobenzene	ND	50	ug/L	
1,3,5-Trimethylbenzene	ND	50	ug/L	
2-Chlorotoluene	ND	50	ug/L	
4-Chlorotoluene	ND	50	ug/L	
tert-Butylbenzene	ND	50	ug/L	
1,2,4-Trimethylbenzene	ND	50	ug/L	

ND = Not Detected



Environmental (cont.)
Services

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: DW-121896
LAB ID: 123721-0011-SA
Matrix: WATER Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 28 DEC 96 Analyzed: 28 DEC 96
Instrument: GC/MS-MC Dilution: 50

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	50	ug/L	
Isopropyltoluene	ND	50	ug/L	
1,3-Dichlorobenzene	ND	50	ug/L	
1,4-Dichlorobenzene	ND	50	ug/L	
n-Butylbenzene	ND	50	ug/L	
1,2-Dichlorobenzene	ND	50	ug/L	
1,2-Dibromo-3-chloro-propane (DBCP)	ND	50	ug/L	
1,2,4-Trichlorobenzene	ND	50	ug/L	
Hexachlorobutadiene	ND	50	ug/L	
Naphthalene	ND	50	ug/L	
1,2,3-Trichlorobenzene	ND	50	ug/L	
Acetone	ND	500	ug/L	
2-Butanone	ND	500	ug/L	
4-Methyl-2-pentanone	ND	500	ug/L	
2-Hexanone	ND	500	ug/L	
Carbon disulfide	ND	250	ug/L	
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	109	%	80 - 120	
Toluene-d8	100	%	88 - 110	
Bromofluorobenzene	93	%	86 - 115	

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: TB-121896
LAB ID: 123721-0012-TB
Matrix: WATER-QA Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	1.0		ug/L
Chloromethane	ND	1.0		ug/L
Vinyl chloride	ND	1.0		ug/L
Bromomethane	ND	1.0		ug/L
Chloroethane	ND	1.0		ug/L
Trichlorofluoromethane	ND	1.0		ug/L
1,1-Dichloroethene	ND	1.0		ug/L
Methylene chloride	ND	1.0		ug/L
trans-1,2-Dichloroethene	ND	1.0		ug/L
1,1-Dichloroethane	ND	1.0		ug/L
2,2-Dichloropropane	ND	1.0		ug/L
cis-1,2-Dichloroethene	ND	1.0		ug/L
Chloroform	ND	1.0		ug/L
Bromochloromethane	ND	1.0		ug/L
1,1,1-Trichloroethane	ND	1.0		ug/L
1,1-Dichloropropene	ND	1.0		ug/L
Carbon tetrachloride	ND	1.0		ug/L
1,2-Dichloroethane	ND	1.0		ug/L
Benzene	ND	1.0		ug/L
Trichloroethene	ND	1.0		ug/L
1,2-Dichloropropane	ND	1.0		ug/L
Bromodichloromethane	ND	1.0		ug/L
Dibromomethane	ND	1.0		ug/L
Toluene	ND	1.0		ug/L
1,1,2-Trichloroethane	ND	1.0		ug/L
1,2-Dibromoethane (EDB)	ND	1.0		ug/L
1,3-Dichloropropane	ND	1.0		ug/L
Tetrachloroethene	ND	1.0		ug/L
Dibromochloromethane	ND	1.0		ug/L
Chlorobenzene	ND	1.0		ug/L
1,1,1,2-Tetrachloroethane	ND	1.0		ug/L
Ethylbenzene	ND	1.0		ug/L
Xylenes (total)	ND	1.0		ug/L
Styrene	ND	1.0		ug/L
Bromoform	ND	1.0		ug/L
1-Methylethylbenzene	ND	1.0		ug/L
1,1,2,2-Tetrachloroethane	ND	1.0		ug/L
1,2,3-Trichloropropane	ND	1.0		ug/L
n-Propylbenzene	ND	1.0		ug/L
Bromobenzene	ND	1.0		ug/L
1,3,5-Trimethylbenzene	ND	1.0		ug/L
2-Chlorotoluene	ND	1.0		ug/L
4-Chlorotoluene	ND	1.0		ug/L
tert-Butylbenzene	ND	1.0		ug/L
1,2,4-Trimethylbenzene	ND	1.0		ug/L

ND = Not Detected

Environmental (cont.)
ServicesVolatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: TB-121896
LAB ID: 123721-0012-TB
Matrix: WATER-QA Sampled: 18 DEC 96 Received: 18 DEC 96
Authorized: 19 DEC 96 Prepared: 23 DEC 96 Analyzed: 23 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		1.0	ug/L
Isopropyltoluene	ND		1.0	ug/L
1,3-Dichlorobenzene	ND		1.0	ug/L
1,4-Dichlorobenzene	ND		1.0	ug/L
n-Butylbenzene	ND		1.0	ug/L
1,2-Dichlorobenzene	ND		1.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		1.0	ug/L
1,2,4-Trichlorobenzene	ND		1.0	ug/L
Hexachlorobutadiene	ND		1.0	ug/L
Naphthalene	ND		1.0	ug/L
1,2,3-Trichlorobenzene	ND		1.0	ug/L
Acetone	ND		10	ug/L
2-Butanone	ND		10	ug/L
4-Methyl-2-pentanone	ND		10	ug/L
2-Hexanone	ND		10	ug/L
Carbon disulfide	ND		5.0	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	110	%	80 - 120	
Toluene-d8	105	%	88 - 110	
Bromofluorobenzene	98	%	86 - 115	

ND = Not Detected

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax



January 9, 1997

KENNEDY/JENKS CONSULTANTS
2151 MICHELSON DRIVE, SUITE 100
IRVINE, CA 92715
ATTN: MR. RUS PURCELL

LIMS NO.: 123741-0001/0006
DATE SAMPLED: 19-DEC-1996
DATE SAMPLE REC'D: 19-DEC-1996
PROJECT: McDONNELL DOUGLAS GROUNDWATER

Enclosed with this letter is the report containing the analytical results for the project specified above.

The Narrative section included in the following attachment provides a detailed description of all events that occurred during sample processing, analysis, and data review as applicable to the samples and analytical methods requested.

Report data sheets contain a list of the requested constituents measured in each test, the analytical results, and the standard reporting limits (RLs). Reporting limits are adjusted to reflect any dilution or dry weight correction, when applicable. Also provided in this report are the LIMS Report Key and the terms and abbreviations commonly used in our reports.

Preliminary data were provided on January 2, 1997 at 4:05 P.M. to Jay Knight.

The report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding the data provided in this report, please call Pat Abe at (714) 258-8610. Release of this report has been authorized by the Lab Director or the designee as demonstrated by the following signature.

Sincerely,



Project Manager

cc: Project File

LIMS REPORT KEY

Environmental
Services

Section	Description
Cover letter	Signature page, report narrative as applicable.
Sample Description Information	Tabulated cross-reference between the Lab ID and Client ID, including matrix, date and time sampled and the date received for all samples in the project.
Sample Analysis Results Sheets	Lists sample results, test components, reporting limits, dates prepared and analyzed and any data qualifiers. Pages are organized by test.
QC Lot Assignment Report	Cross-reference between lab IDs and applicable QC batches (DCS, LCS, SCS, Blank, MS/SD, DU)
Duplicate Control Sample Report	Percent recovery and RPD results, with acceptance limits, for the laboratory Duplicate Control Samples for each test are tabulated in this report. These are measures of accuracy and precision for each test.
Laboratory Control Sample Report	Percent recovery results for a single Laboratory Control Sample (if applicable) are tabulated in this report, with the applicable acceptance limits for each test.
Matrix Spike/Matrix Spike Duplicate Report	Percent recovery and RPD results for matrix-specific QC samples and acceptance limits, where applicable. This report can be used to assess matrix effects on an analysis.
Single Control Sample Report	A tabulation of the surrogate recoveries for the blank for organic analyses.
Method Blank Report	A summary of the results of the analysis of the method blank for each test.

List of Abbreviations and Terms

DCS	Duplicate Control Sample	MSD	Matrix Spike Duplicate
DU	Sample Duplicate	QC Run	Preparation batch
EB	Equipment Blank	QC Category	LIMS QC Category
FB	Field Blank	QC Lot	DCS batch
FD	Field Duplicate	ND	Not Detected at the reporting limit expressed
IDL	Instrument Detection Limit	QC Matrix	Matrix of the laboratory control sample (s)
LCS	Laboratory Control Sample	RL	Reporting Limit
MB	Method Blank	QC	Quality Control
MDL	Method Detection Limit	SA	Sample
MS	Matrix Spike	SD	See MSD
RPD	Relative Percent Difference	TB	Trip Blank
ppm (parts-per-million)	mg/L or mg/kg	ppb (parts-per-billion)	$\mu\text{g}/\text{L}$ or $\mu\text{g}/\text{kg}$
QUAL	Qualifier flag	DIL	Dilution Factor

Refer to the Quanterra Incorporated Quality Assurance Management Plan for detailed explanations of terms summarized above.

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LIMS # 123741

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CASE NARRATIVE

LIMS # 123741

I. CONDITION UPON RECEIPT

The samples were not received in intact. The temperature of the cooler was 3.5°C

Sample containers were received intact. The VOA vials did not contain headspace. Sample container label did agree with the COC as to sample ID, collection time/date, and requested tests.

Samples were received in time to meet the method holding time specifications.

II. ORGANIC ANALYSES (BY METHOD: SW8260)

HOLDING TIME

All samples were prepared and analyzed within the method-specified holding time requirements.

METHOD BLANK

All method blanks met method- and/or project-specific QC criteria.

MS/MSD/LCS/DCS AND RPDs

All spike recovery and RPD data met method- and/or project-specific QC criteria.

MS/MSD recoveries for 1,1-dichloroethene and toluene in MS Run 30 DEC 96-AD could not be calculated due to high constituent levels in the sample.

SURROGATE RECOVERIES

All surrogate spike recoveries in samples and in QC samples met method- and/or project-specific QC criteria.

CALIBRATIONS

All calibrations and calibration verifications met method- and/or project-specific QC criteria.

*Chain of Custody
Record*

Quanterra
Environmental
Services

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy



Environmental
Services

SAMPLE DESCRIPTION INFORMATION
for
Kennedy/Jenks Consultants

Lab ID	Client ID	Matrix	Sampled Date	Received Time	Received Date
123741-0001-SA	WCC3D-17	WATER	19 DEC 96	09:36	19 DEC 96
123741-0002-SA	WCC3S-17	WATER	19 DEC 96	10:36	19 DEC 96
123741-0003-SA	WCC6S-17	WATER	19 DEC 96	11:25	19 DEC 96
123741-0004-SA	DACPI-17	WATER	19 DEC 96	12:50	19 DEC 96
123741-0005-SA	DW-121996	WATER	19 DEC 96		19 DEC 96
123741-0006-EB	EB-121996	WATER-QA	19 DEC 96	13:10	19 DEC 96



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC3D-17
LAB ID: 123741-0001-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		1.0	ug/L
Chloromethane	ND		1.0	ug/L
Vinyl chloride	ND		1.0	ug/L
Bromomethane	ND		1.0	ug/L
Chloroethane	ND		1.0	ug/L
Trichlorofluoromethane	ND		1.0	ug/L
1,1-Dichloroethene	97		1.0	ug/L
Methylene chloride	ND		1.0	ug/L
trans-1,2-Dichloroethene	ND		1.0	ug/L
1,1-Dichloroethane	1.3		1.0	ug/L
2,2-Dichloropropane	ND		1.0	ug/L
cis-1,2-Dichloroethene	5.4		1.0	ug/L
Chloroform	ND		1.0	ug/L
Bromochloromethane	ND		1.0	ug/L
1,1,1-Trichloroethane	67		1.0	ug/L
1,1-Dichloropropene	ND		1.0	ug/L
Carbon tetrachloride	ND		1.0	ug/L
1,2-Dichloroethane	ND		1.0	ug/L
Benzene	ND		1.0	ug/L
Trichloroethene	42		1.0	ug/L
1,2-Dichloropropene	ND		1.0	ug/L
Bromodichloromethane	ND		1.0	ug/L
Dibromomethane	ND		1.0	ug/L
Toluene	20		1.0	ug/L
1,1,2-Trichloroethane	ND		1.0	ug/L
1,2-Dibromoethane (EDB)	ND		1.0	ug/L
1,3-Dichloropropene	ND		1.0	ug/L
Tetrachloroethene	ND		1.0	ug/L
Dibromochloromethane	ND		1.0	ug/L
Chlorobenzene	ND		1.0	ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L
Ethylbenzene	ND		1.0	ug/L
Xylenes (total)	ND		1.0	ug/L
Styrene	ND		1.0	ug/L
Bromoform	ND		1.0	ug/L
1-Methylethylbenzene	1.1		1.0	ug/L
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L
1,2,3-Trichloropropene	ND		1.0	ug/L
n-Propylbenzene	ND		1.0	ug/L
Bromobenzene	ND		1.0	ug/L
1,3,5-Trimethylbenzene	ND		1.0	ug/L
2-Chlorotoluene	ND		1.0	ug/L
4-Chlorotoluene	ND		1.0	ug/L
tert-Butylbenzene	ND		1.0	ug/L
1,2,4-Trimethylbenzene	ND		1.0	ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC3D-17
LAB ID: 123741-0001-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		1.0	ug/L
Isopropyltoluene	ND		1.0	ug/L
1,3-Dichlorobenzene	ND		1.0	ug/L
1,4-Dichlorobenzene	ND		1.0	ug/L
n-Butylbenzene	ND		1.0	ug/L
1,2-Dichlorobenzene	ND		1.0	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		1.0	ug/L
1,2,4-Trichlorobenzene	ND		1.0	ug/L
Hexachlorobutadiene	ND		1.0	ug/L
Naphthalene	ND		1.0	ug/L
1,2,3-Trichlorobenzene	ND		1.0	ug/L
Acetone	ND		10	ug/L
2-Butanone	ND		10	ug/L
4-Methyl-2-pentanone	ND		10	ug/L
2-Hexanone	ND		10	ug/L
Carbon disulfide	ND		5.0	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	103	%	80	- 120
Toluene-d8	106	%	88	- 110
Bromofluorobenzene	102	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC3S-17
LAB ID: 123741-0002-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 250

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		250	ug/L
Chloromethane	ND		250	ug/L
Vinyl chloride	ND		250	ug/L
Bromomethane	ND		250	ug/L
Chloroethane	ND		250	ug/L
Trichlorofluoromethane	ND		250	ug/L
1,1-Dichloroethene	16000		250	ug/L
Methylene chloride	ND		250	ug/L
trans-1,2-Dichloroethene	460		250	ug/L
1,1-Dichloroethane	380		250	ug/L
2,2-Dichloropropane	ND		250	ug/L
cis-1,2-Dichloroethene	4100		250	ug/L
Chloroform	ND		250	ug/L
Bromochloromethane	ND		250	ug/L
1,1,1-Trichloroethane	2300		250	ug/L
1,1-Dichloropropene	ND		250	ug/L
Carbon tetrachloride	ND		250	ug/L
1,2-Dichloroethane	ND		250	ug/L
Benzene	ND		250	ug/L
Trichloroethene	ND		250	ug/L
1,2-Dichloropropane	ND		250	ug/L
Bromodichloromethane	ND		250	ug/L
Dibromomethane	ND		250	ug/L
Toluene	20000		250	ug/L
1,1,2-Trichloroethane	ND		250	ug/L
1,2-Dibromoethane (EDB)	ND		250	ug/L
1,3-Dichloropropane	ND		250	ug/L
Tetrachloroethene	ND		250	ug/L
Dibromochloromethane	ND		250	ug/L
Chlorobenzene	ND		250	ug/L
1,1,1,2-Tetrachloroethane	ND		250	ug/L
Ethylbenzene	ND		250	ug/L
Xylenes (total)	ND		250	ug/L
Styrene	ND		250	ug/L
Bromoform	ND		250	ug/L
1-Methylethylbenzene	ND		250	ug/L
1,1,2,2-Tetrachloroethane	ND		250	ug/L
1,2,3-Trichloropropane	ND		250	ug/L
n-Propylbenzene	ND		250	ug/L
Bromobenzene	ND		250	ug/L
1,3,5-Trimethylbenzene	ND		250	ug/L
2-Chlorotoluene	ND		250	ug/L
4-Chlorotoluene	ND		250	ug/L
tert-Butylbenzene	ND		250	ug/L
1,2,4-Trimethylbenzene	ND		250	ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC3S-17
LAB ID: 123741-0002-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 250

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		250	ug/L
Isopropyltoluene	ND		250	ug/L
1,3-Dichlorobenzene	ND		250	ug/L
1,4-Dichlorobenzene	ND		250	ug/L
n-Butylbenzene	ND		250	ug/L
1,2-Dichlorobenzene	ND		250	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		250	ug/L
1,2,4-Trichlorobenzene	ND		250	ug/L
Hexachlorobutadiene	ND		250	ug/L
Naphthalene	ND		250	ug/L
1,2,3-Trichlorobenzene	ND		250	ug/L
Acetone	ND		2500	ug/L
2-Butanone	ND		2500	ug/L
4-Methyl-2-pentanone	ND		2500	ug/L
2-Hexanone	ND		2500	ug/L
Carbon disulfide	ND		1200	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	104	%	80	- 120
Toluene-d8	103	%	88	- 110
Bromofluorobenzene	100	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: WCC6S-17
LAB ID: 123741-0003-SA
Matrix: WATER
Authorized: 19 DEC 96
Instrument: GC/MS-MD

Sampled: 19 DEC 96
Prepared: 30 DEC 96
Dilution: 100

Received: 19 DEC 96
Analyzed: 30 DEC 96

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	100		ug/L
Chloromethane	ND	100		ug/L
Vinyl chloride	ND	100		ug/L
Bromomethane	ND	100		ug/L
Chloroethane	ND	100		ug/L
Trichlorofluoromethane	ND	100		ug/L
1,1-Dichloroethene	7000	100		ug/L
Methylene chloride	ND	100		ug/L
trans-1,2-Dichloroethene	110	100		ug/L
1,1-Dichloroethane	ND	100		ug/L
2,2-Dichloropropane	ND	100		ug/L
cis-1,2-Dichloroethene	880	100		ug/L
Chloroform	ND	100		ug/L
Bromoform	ND	100		ug/L
Bromochloromethane	ND	100		ug/L
1,1,1-Trichloroethane	680	100		ug/L
1,1-Dichloropropene	ND	100		ug/L
Carbon tetrachloride	ND	100		ug/L
1,2-Dichloroethane	ND	100		ug/L
Benzene	ND	100		ug/L
Trichloroethene	2200	100		ug/L
1,2-Dichloropropane	ND	100		ug/L
Bromodichloromethane	ND	100		ug/L
Dibromomethane	ND	100		ug/L
Toluene	2600	100		ug/L
1,1,2-Trichloroethane	ND	100		ug/L
1,2-Dibromoethane (EDB)	ND	100		ug/L
1,3-Dichloropropane	ND	100		ug/L
Tetrachloroethene	ND	100		ug/L
Dibromochloromethane	ND	100		ug/L
Chlorobenzene	ND	100		ug/L
1,1,1,2-Tetrachloroethane	ND	100		ug/L
Ethylbenzene	ND	100		ug/L
Xylenes (total)	ND	100		ug/L
Styrene	ND	100		ug/L
Bromoform	ND	100		ug/L
1-Methylethylbenzene	ND	100		ug/L
1,1,2,2-Tetrachloroethane	ND	100		ug/L
1,2,3-Trichloropropane	ND	100		ug/L
n-Propylbenzene	ND	100		ug/L
Bromobenzene	ND	100		ug/L
1,3,5-Trimethylbenzene	ND	100		ug/L
2-Chlorotoluene	ND	100		ug/L
4-Chlorotoluene	ND	100		ug/L
tert-Butylbenzene	ND	100		ug/L
1,2,4-Trimethylbenzene	ND	100		ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: WCC6S-17
LAB ID: 123741-0003-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 100

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	100		ug/L
Isopropyltoluene	ND	100		ug/L
1,3-Dichlorobenzene	ND	100		ug/L
1,4-Dichlorobenzene	ND	100		ug/L
n-Butylbenzene	ND	100		ug/L
1,2-Dichlorobenzene	ND	100		ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND	100		ug/L
1,2,4-Trichlorobenzene	ND	100		ug/L
Hexachlorobutadiene	ND	100		ug/L
Naphthalene	ND	100		ug/L
1,2,3-Trichlorobenzene	ND	100		ug/L
Acetone	ND	1000		ug/L
2-Butanone	ND	1000		ug/L
4-Methyl-2-pentanone	ND	1000		ug/L
2-Hexanone	ND	1000		ug/L
Carbon disulfide	ND	500		ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	103	%	80 - 120	
Toluene-d8	103	%	88 - 110	
Bromofluorobenzene	101	%	86 - 115	

ND = Not Detected

Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
 Client ID: DACPI-17
 LAB ID: 123741-0004-SA
 Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
 Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
 Instrument: GC/MS-MD Dilution: 500

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	500	ug/L	
Chloromethane	ND	500	ug/L	
Vinyl chloride	ND	500	ug/L	
Bromomethane	ND	500	ug/L	
Chloroethane	ND	500	ug/L	
Trichlorofluoromethane	ND	500	ug/L	
1,1-Dichloroethene	ND	500	ug/L	
Methylene chloride	ND	500	ug/L	
trans-1,2-Dichloroethene	ND	500	ug/L	
1,1-Dichloroethane	ND	500	ug/L	
2,2-Dichloropropane	ND	500	ug/L	
cis-1,2-Dichloroethene	ND	500	ug/L	
Chloroform	ND	500	ug/L	
Bromochloromethane	ND	500	ug/L	
1,1,1-Trichloroethane	ND	500	ug/L	
1,1-Dichloropropene	ND	500	ug/L	
Carbon tetrachloride	ND	500	ug/L	
1,2-Dichloroethane	ND	500	ug/L	
Benzene	ND	500	ug/L	
Trichloroethene	15000	500	ug/L	
1,2-Dichloropropane	ND	500	ug/L	
Bromodichloromethane	ND	500	ug/L	
Dibromomethane	ND	500	ug/L	
Toluene	610	500	ug/L	
1,1,2-Trichloroethane	ND	500	ug/L	
1,2-Dibromoethane (EDB)	ND	500	ug/L	
1,3-Dichloropropane	ND	500	ug/L	
Tetrachloroethene	ND	500	ug/L	
Dibromochloromethane	ND	500	ug/L	
Chlorobenzene	ND	500	ug/L	
1,1,1,2-Tetrachloroethane	ND	500	ug/L	
Ethylbenzene	ND	500	ug/L	
Xylenes (total)	ND	500	ug/L	
Styrene	ND	500	ug/L	
Bromoform	ND	500	ug/L	
1-Methylethylbenzene	ND	500	ug/L	
1,1,2,2-Tetrachloroethane	ND	500	ug/L	
1,2,3-Trichloropropane	ND	500	ug/L	
n-Propylbenzene	ND	500	ug/L	
Bromobenzene	ND	500	ug/L	
1,3,5-Trimethylbenzene	ND	500	ug/L	
2-Chlorotoluene	ND	500	ug/L	
4-Chlorotoluene	ND	500	ug/L	
tert-Butylbenzene	ND	500	ug/L	
1,2,4-Trimethylbenzene	ND	500	ug/L	

ND = Not Detected



**Volatile Organic Compounds
Method 8260**

Environmental Services (cont.)

Client Name: Kennedy/Jenks Consultants
Client ID: DACPI-17
LAB ID: 123741-0004-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 30 DEC 96 Analyzed: 30 DEC 96
Instrument: GC/MS-MD Dilution: 500

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND		500	ug/L
Isopropyltoluene	ND		500	ug/L
1,3-Dichlorobenzene	ND		500	ug/L
1,4-Dichlorobenzene	ND		500	ug/L
n-Butylbenzene	ND		500	ug/L
1,2-Dichlorobenzene	ND		500	ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND		500	ug/L
1,2,4-Trichlorobenzene	ND		500	ug/L
Hexachlorobutadiene	ND		500	ug/L
Naphthalene	ND		500	ug/L
1,2,3-Trichlorobenzene	ND		500	ug/L
Acetone	ND		5000	ug/L
2-Butanone	ND		5000	ug/L
4-Methyl-2-pentanone	ND		5000	ug/L
2-Hexanone	ND		5000	ug/L
Carbon disulfide	ND		2500	ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	100	%	80 - 120	
Toluene-d8	101	%	88 - 110	
Bromofluorobenzene	96	%	86 - 115	

ND = Not Detected

Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
 Client ID: DW-121996
 LAB ID: 123741-0005-SA
 Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
 Authorized: 19 DEC 96 Prepared: 31 DEC 96 Analyzed: 31 DEC 96
 Instrument: GC/MS-MC Dilution: 100

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND	100		ug/L
Chloromethane	ND	100		ug/L
Vinyl chloride	ND	100		ug/L
Bromomethane	ND	100		ug/L
Chloroethane	ND	100		ug/L
Trichlorofluoromethane	ND	100		ug/L
1,1-Dichloroethene	8300	100		ug/L
Methylene chloride	ND	100		ug/L
trans-1,2-Dichloroethene	130	100		ug/L
1,1-Dichloroethane	ND	100		ug/L
2,2-Dichloropropane	ND	100		ug/L
cis-1,2-Dichloroethene	1000	100		ug/L
Chloroform	ND	100		ug/L
Bromochloromethane	ND	100		ug/L
1,1,1-Trichloroethane	820	100		ug/L
1,1-Dichloropropene	ND	100		ug/L
Carbon tetrachloride	ND	100		ug/L
1,2-Dichloroethane	ND	100		ug/L
Benzene	ND	100		ug/L
Trichloroethene	2600	100		ug/L
1,2-Dichloropropane	ND	100		ug/L
Bromodichloromethane	ND	100		ug/L
Dibromomethane	ND	100		ug/L
Toluene	3000	100		ug/L
1,1,2-Trichloroethane	ND	100		ug/L
1,2-Dibromoethane (EDB)	ND	100		ug/L
1,3-Dichloropropane	ND	100		ug/L
Tetrachloroethene	ND	100		ug/L
Dibromochloromethane	ND	100		ug/L
Chlorobenzene	ND	100		ug/L
1,1,1,2-Tetrachloroethane	ND	100		ug/L
Ethylbenzene	ND	100		ug/L
Xylenes (total)	ND	100		ug/L
Styrene	ND	100		ug/L
Bromoform	ND	100		ug/L
1-Methylethylbenzene	ND	100		ug/L
1,1,2,2-Tetrachloroethane	ND	100		ug/L
1,2,3-Trichloropropane	ND	100		ug/L
n-Propylbenzene	ND	100		ug/L
Bromobenzene	ND	100		ug/L
1,3,5-Trimethylbenzene	ND	100		ug/L
2-Chlorotoluene	ND	100		ug/L
4-Chlorotoluene	ND	100		ug/L
tert-Butylbenzene	ND	100		ug/L
1,2,4-Trimethylbenzene	ND	100		ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: DW-121996
LAB ID: 123741-0005-SA
Matrix: WATER Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 31 DEC 96 Analyzed: 31 DEC 96
Instrument: GC/MS-MC Dilution: 100

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	100		ug/L
Isopropyltoluene	ND	100		ug/L
1,3-Dichlorobenzene	ND	100		ug/L
1,4-Dichlorobenzene	ND	100		ug/L
n-Butylbenzene	ND	100		ug/L
1,2-Dichlorobenzene	ND	100		ug/L
1,2-Dibromo-3-chloro-propane (DBCP)	ND	100		ug/L
1,2,4-Trichlorobenzene	ND	100		ug/L
Hexachlorobutadiene	ND	100		ug/L
Naphthalene	ND	100		ug/L
1,2,3-Trichlorobenzene	ND	100		ug/L
Acetone	ND	1000		ug/L
2-Butanone	ND	1000		ug/L
4-Methyl-2-pentanone	ND	1000		ug/L
2-Hexanone	ND	1000		ug/L
Carbon disulfide	ND	500		ug/L
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	107	%	80	- 120
Toluene-d8	104	%	88	- 110
Bromofluorobenzene	99	%	86	- 115

ND = Not Detected



Volatile Organic Compounds
Method 8260

Environmental
Services

Client Name: Kennedy/Jenks Consultants
Client ID: EB-121996
LAB ID: 123741-0006-EB
Matrix: WATER-QA Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 31 DEC 96 Analyzed: 31 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		1.0	ug/L
Chloromethane	ND		1.0	ug/L
Vinyl chloride	ND		1.0	ug/L
Bromomethane	ND		1.0	ug/L
Chloroethane	ND		1.0	ug/L
Trichlorofluoromethane	ND		1.0	ug/L
1,1-Dichloroethene	ND		1.0	ug/L
Methylene chloride	ND		1.0	ug/L
trans-1,2-Dichloroethene	ND		1.0	ug/L
1,1-Dichloroethane	ND		1.0	ug/L
2,2-Dichloropropane	ND		1.0	ug/L
cis-1,2-Dichloroethene	ND		1.0	ug/L
Chloroform	ND		1.0	ug/L
Bromochloromethane	ND		1.0	ug/L
1,1,1-Trichloroethane	ND		1.0	ug/L
1,1-Dichloropropene	ND		1.0	ug/L
Carbon tetrachloride	ND		1.0	ug/L
1,2-Dichloroethane	ND		1.0	ug/L
Benzene	ND		1.0	ug/L
Trichloroethene	ND		1.0	ug/L
1,2-Dichloropropane	ND		1.0	ug/L
Bromodichloromethane	ND		1.0	ug/L
Dibromomethane	ND		1.0	ug/L
Toluene	ND		1.0	ug/L
1,1,2-Trichloroethane	ND		1.0	ug/L
1,2-Dibromoethane (EDB)	ND		1.0	ug/L
1,3-Dichloropropane	ND		1.0	ug/L
Tetrachloroethene	ND		1.0	ug/L
Dibromochloromethane	ND		1.0	ug/L
Chlorobenzene	ND		1.0	ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L
Ethylbenzene	ND		1.0	ug/L
Xylenes (total)	ND		1.0	ug/L
Styrene	ND		1.0	ug/L
Bromoform	ND		1.0	ug/L
1-Methylethylbenzene	ND		1.0	ug/L
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L
1,2,3-Trichloropropane	ND		1.0	ug/L
n-Propylbenzene	ND		1.0	ug/L
Bromobenzene	ND		1.0	ug/L
1,3,5-Trimethylbenzene	ND		1.0	ug/L
2-Chlorotoluene	ND		1.0	ug/L
4-Chlorotoluene	ND		1.0	ug/L
tert-Butylbenzene	ND		1.0	ug/L
1,2,4-Trimethylbenzene	ND		1.0	ug/L

ND = Not Detected



Environmental Services (cont.)

Volatile Organic Compounds
Method 8260

Client Name: Kennedy/Jenks Consultants
Client ID: EB-121996
LAB ID: 123741-0006-EB
Matrix: WATER-QA Sampled: 19 DEC 96 Received: 19 DEC 96
Authorized: 19 DEC 96 Prepared: 31 DEC 96 Analyzed: 31 DEC 96
Instrument: GC/MS-MC Dilution: 1.0

Parameter	Result	Qualifier	RL	Units
sec-Butylbenzene	ND	1.0	ug/L	
Isopropyltoluene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
n-Butylbenzene	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,2-Dibromo-3-chloro-propane (DBCP)	ND	1.0	ug/L	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
Acetone	ND	10	ug/L	
2-Butanone	ND	10	ug/L	
4-Methyl-2-pentanone	ND	10	ug/L	
2-Hexanone	ND	10	ug/L	
Carbon disulfide	ND	5.0	ug/L	
Surrogate	Recovery		Acceptable Range	
1,2-Dichloroethane-d4	90	%	80 - 120	
Toluene-d8	101	%	88 - 110	
Bromofluorobenzene	88	%	86 - 115	

ND = Not Detected

APPENDIX B

**LABORATORY/FIELD QUALITY CONTROL
DATA SHEETS**



Environmental
Services

QC LOT ASSIGNMENT REPORT - MS QC
Volatile Organics by GC/MS

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Number (SA,MS,SD,DU)
123721-0001-SA	AQUEOUS	8260-A		23 DEC 96-ACX	27 DEC 96-AC
123721-0002-SA	AQUEOUS	8260-A		23 DEC 96-ACX	27 DEC 96-AC
123721-0003-SA	AQUEOUS	8260-A		23 DEC 96-ACX	27 DEC 96-AC
123721-0004-SA	AQUEOUS	8260-A		27 DEC 96-ACX	27 DEC 96-AC
123721-0005-SA	AQUEOUS	8260-A		27 DEC 96-ACX	27 DEC 96-AC
123721-0006-SA	AQUEOUS	8260-A		27 DEC 96-ACX	27 DEC 96-AC
123721-0007-SA	AQUEOUS	8260-A		27 DEC 96-ACX	27 DEC 96-AC
123721-0008-SA	AQUEOUS	8260-A		27 DEC 96-ACX	27 DEC 96-AC
123721-0009-SA	AQUEOUS	8260-A		28 DEC 96-ACX	27 DEC 96-AC
123721-0010-SA	AQUEOUS	8260-A		28 DEC 96-ACX	27 DEC 96-AC
123721-0011-SA	AQUEOUS	8260-A		28 DEC 96-ACX	27 DEC 96-AC
123721-0012-TB	AQUEOUS	8260-A		23 DEC 96-ACX	27 DEC 96-AC



Environmental
Services

LABORATORY CONTROL SAMPLE REPORT
Volatile Organics by GC/MS
Project: 123721

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 28 DEC 96-ACX

Concentration Units: ug/L

Date Analyzed: 28 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	9.20	92	64-124
Benzene	10.0	10.6	106	67-127
Trichloroethene	10.0	10.2	102	60-120
Toluene	10.0	10.5	105	72-132
Chlorobenzene	10.0	10.8	108	68-128

Surrogates	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	11.2	112	80-120
Toluene-d8	10.0	9.89	99	88-110
Bromofluorobenzene	10.0	9.86	99	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 27 DEC 96-ACX

Concentration Units: ug/L

Date Analyzed: 27 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	9.10	91	64-124
Benzene	10.0	10.7	107	67-127
Trichloroethene	10.0	10.4	104	60-120
Toluene	10.0	10.6	106	72-132
Chlorobenzene	10.0	10.6	106	68-128

Surrogates	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	11.1	111	80-120
Toluene-d8	10.0	9.91	99	88-110
Bromofluorobenzene	10.0	9.80	98	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 23 DEC 96-ACX

Concentration Units: ug/L

Date Analyzed: 23 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	8.39	84	64-124
Benzene	10.0	10.3	103	67-127
Trichloroethene	10.0	9.82	98	60-120
Toluene	10.0	10.0	100	72-132
Chlorobenzene	10.0	10.2	102	68-128

Calculations are performed before rounding to avoid round-off errors in calculated results.



Environmental
Services

LABORATORY CONTROL SAMPLE REPORT
Volatile Organics by GC/MS
Project: 123721

(cont.)

Surrogates	Concentration		Accuracy (%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	11.1	111	80-120
Toluene-d8	10.0	10.2	102	88-110
Bromofluorobenzene	10.0	9.90	99	86-115

Calculations are performed before rounding to avoid round-off errors in calculated results.



Environmental
Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Volatile Organics by GC/MS
Project: 123721

Category: 8260-A Volatile Organics, 8260
Matrix: AQUEOUS
Sample: 123721-0004
MS Run: 27 DEC 96-AC
Units: ug/L

Analyte	Concentration			Amount Spiked MS/MSD	%Recovery		%RPD MS MSD	Acceptance Limit	
	Sample Result	MS Result	MSD Result		MS	MSD		Recov.	RPD
1,1-Dichloroethene	29.7	52.6	51.1	20.0	114	107	2.9	64-124	25
Benzene	ND	23.8	21.1	20.0	119	106	12	67-127	25
Trichloroethene	118	142	146	20.0	NC	NC	NC	60-120	25
Toluene	ND	23.2	21.0	20.0	116	105	10	72-132	25
Chlorobenzene	ND	23.2	20.4	20.0	116	102	13	68-128	25
Surrogates	Sample %Recovery			%Recovery		Acceptance MS MSD		Limit Recovery	
	1,2-Dichloroethane-d4	97		99		105		80-120	
Toluene-d8	98			96		101		88-110	
Bromofluorobenzene	93			90		96		86-115	

NC = Not Calculated, calculation not applicable.

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

SINGLE CONTROL SAMPLE REPORT
Volatile Organics by GC/MS
Project: 123721

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 28 DEC 96-ACX

Date Analyzed: 28 DEC 96

Concentration Units: ug/L

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	10.5	105	80-120
Toluene-d8	10.0	9.86	99	88-110
Bromofluorobenzene	10.0	9.19	92	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 27 DEC 96-ACX

Date Analyzed: 27 DEC 96

Concentration Units: ug/L

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	10.3	103	80-120
Toluene-d8	10.0	9.65	96	88-110
Bromofluorobenzene	10.0	9.19	92	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 23 DEC 96-ACX

Date Analyzed: 23 DEC 96

Concentration Units: ug/L

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	10.5	105	80-120
Toluene-d8	10.0	10.2	102	88-110
Bromofluorobenzene	10.0	9.80	98	86-115

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT
 Volatile Organics by GC/MS
 Project: 123721

Test: 8260-A
 Matrix: AQUEOUS
 QC Run: 23 DEC 96-ACX

Method 8260 - Volatile Organics

Date Analyzed: 23 DEC 96
 Reporting

Analyte	Result	Units	Limit
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorofluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0
1,3-Dichlorobenzene	ND	ug/L	1.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123721

Test: 8260-A Method 8260 - Volatile Organics
Matrix: AQUEOUS
QC Run: 23 DEC 96-ACX

(cont.)

Date Analyzed: 23 DEC 96
Reporting
Limit

Analyte	Result	Units	
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected

METHOD BLANK REPORT (cont.)
 Volatile Organics by GC/MS
 Project: 123721

Test: 8260-A
 Matrix: AQUEOUS

Method 8260 - Volatile Organics

(cont.)

QC Run: 27 DEC 96-ACX

Date Analyzed: 27 DEC 96
 Reporting
 Limit

Analyte	Result	Units	
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorofluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123721

Test: 8260-A
Matrix: AQUEOUS

Method 8260 - Volatile Organics

(cont.)

QC Run: 27 DEC 96-ACX

Date Analyzed: 27 DEC 96
Reporting
Limit

Analyte	Result	Units	
1,3-Dichlorobenzene	ND	ug/L	1.0
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected

METHOD BLANK REPORT (cont.)
 Volatile Organics by GC/MS
 Project: 123721

Test: 8260-A
 Matrix: AQUEOUS

Method 8260 - Volatile Organics

(cont.)

QC Run: 28 DEC 96-ACX

Date Analyzed: 28 DEC 96
 Reporting
 Limit

Analyte	Result	Units	
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorofluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123721

Test: 8260-A Method 8260 - Volatile Organics
Matrix: AQUEOUS

(cont.)

QC Run: 28 DEC 96-ACX

Date Analyzed: 28 DEC 96
Reporting
Limit

Analyte	Result	Units	
1,3-Dichlorobenzene	ND	ug/L	1.0
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected



Environmental
Services

QC LOT ASSIGNMENT REPORT - MS QC
Volatile Organics by GC/MS

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK/LCS)	MS QC Run Number (SA, MS, SD, DU)
123741-0001-SA	AQUEOUS	8260-A		30 DEC 96-ADX	30 DEC 96-AD
123741-0002-SA	AQUEOUS	8260-A		30 DEC 96-ADX	30 DEC 96-AD
123741-0003-SA	AQUEOUS	8260-A		30 DEC 96-BDX	30 DEC 96-AD
123741-0004-SA	AQUEOUS	8260-A		30 DEC 96-BDX	30 DEC 96-AD
123741-0005-SA	AQUEOUS	8260-A		31 DEC 96-BCX	30 DEC 96-AD
123741-0006-EB	AQUEOUS	8260-A		31 DEC 96-BCX	30 DEC 96-AD



Environmental
Services

LABORATORY CONTROL SAMPLE REPORT
Volatile Organics by GC/MS
Project: 123741

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 31 DEC 96-BCX

Concentration Units: ug/L

Date Analyzed: 31 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	10.9	109	64-124
Benzene	10.0	10.3	103	67-127
Trichloroethene	10.0	10.2	102	60-120
Toluene	10.0	10.5	105	72-132
Chlorobenzene	10.0	9.61	96	68-128
Surrogates	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	9.94	99	80-120
Toluene-d8	10.0	10.1	101	88-110
Bromofluorobenzene	10.0	9.79	98	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 30 DEC 96-BDX

Concentration Units: ug/L

Date Analyzed: 30 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	12.4	124	64-124
Benzene	10.0	11.2	112	67-127
Trichloroethene	10.0	10.6	106	60-120
Toluene	10.0	10.8	108	72-132
Chlorobenzene	10.0	10.4	104	68-128
Surrogates	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	10.3	103	80-120
Toluene-d8	10.0	10.3	103	88-110
Bromofluorobenzene	10.0	9.93	99	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 30 DEC 96-ADX

Concentration Units: ug/L

Date Analyzed: 30 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	LCS	Limits
1,1-Dichloroethene	10.0	11.0	110	64-124
Benzene	10.0	10.4	104	67-127
Trichloroethene	10.0	10.2	102	60-120
Toluene	10.0	10.1	101	72-132
Chlorobenzene	10.0	10.5	105	68-128

Calculations are performed before rounding to avoid round-off errors in calculated results.



Environmental
Services

LABORATORY CONTROL SAMPLE REPORT
Volatile Organics by GC/MS
Project: 123741

(cont.)

Surrogates	Concentration		Accuracy (%)	
	Spiked	Measured	LCS	Limits
1,2-Dichloroethane-d4	10.0	10.4	104	80-120
Toluene-d8	10.0	10.1	101	88-110
Bromofluorobenzene	10.0	10.0	100	86-115

Calculations are performed before rounding to avoid round-off errors in calculated results.



Environmental
Services

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC REPORT
Volatile Organics by GC/MS
Project: 123741

Category: 8260-A Volatile Organics, 8260
Matrix: AQUEOUS
Sample: 123741-0002
MS Run: 30 DEC 96-AD
Units: ug/L

Analyte	Concentration			Amount Spiked MS/MSD	%Recovery		Acceptance Limit Recov.	RPD	
	Sample Result	MS Result	MSD Result		MS	MSD			
1,1-Dichloroethene	15800	18100	17200	2500	NC	NC	NC	64-124	25
Benzene	ND	2770	2800	2500	111	112	1.1	67-127	25
Trichloroethene	ND	2800	2750	2500	112	110	1.8	60-120	25
Toluene	20400	23100	23200	2500	NC	NC	NC	72-132	25
Chlorobenzene	ND	2550	2650	2500	102	106	3.8	68-128	25
Surrogates	Sample %Recovery			%Recovery		Acceptance Limit Recovery			
	1,2-Dichloroethane-d4	104		106		99		80-120	
Toluene-d8	103			104		105		88-110	
Bromofluorobenzene	100			103		109		86-115	

NC = Not Calculated, calculation not applicable.

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

SINGLE CONTROL SAMPLE REPORT
 Volatile Organics by GC/MS
 Project: 123741

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 31 DEC 96-BCX

Concentration Units: ug/L

Date Analyzed: 31 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	9.86	99	80-120
Toluene-d8	10.0	9.84	98	88-110
Bromofluorobenzene	10.0	9.40	94	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 30 DEC 96-BDX

Concentration Units: ug/L

Date Analyzed: 30 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	10.4	104	80-120
Toluene-d8	10.0	10.2	102	88-110
Bromofluorobenzene	10.0	9.77	98	86-115

Category: 8260-A Volatile Organics, 8260

Matrix: AQUEOUS

QC Run: 30 DEC 96-ADX

Concentration Units: ug/L

Date Analyzed: 30 DEC 96

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits
1,2-Dichloroethane-d4	10.0	9.41	94	80-120
Toluene-d8	10.0	10.3	103	88-110
Bromofluorobenzene	10.0	10.0	100	86-115

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT
 Volatile Organics by GC/MS
 Project: 123741

Environmental
 Services

Test: 8260-A
 Matrix: AQUEOUS
 QC Run: 30 DEC 96-ADX

Method 8260 - Volatile Organics

Date Analyzed: 30 DEC 96
 Reporting
 Limit

Analyte	Result	Units	
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorofluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0
1,3-Dichlorobenzene	ND	ug/L	1.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123741

Test: 8260-A
Matrix: AQUEOUS
QC Run: 30 DEC 96-ADX

Method 8260 - Volatile Organics

(cont.)

Date Analyzed: 30 DEC 96
Reporting

Analyte	Result	Units	Limit
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123741

Test: 8260-A
Matrix: AQUEOUS

Method 8260 - Volatile Organics

(cont.)

QC Run: 30 DEC 96-BDX

Date Analyzed: 30 DEC 96
Reporting
Limit

Analyte	Result	Units	
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorofluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0

ND = Not Detected



*Environmental
Services*

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123741

Test: 8260-A Method 8260 - Volatile Organics
Matrix: AQUEOUS

(cont.)

QC Run: 30 DEC 96-BDX

Date Analyzed: 30 DEC 96
Reporting
Limit

Analyte

Result Units

Units

1,3-Dichlorobenzene	ND	ug/L	1.0
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123741

Test: 8260-A
Matrix: AQUEOUS

Method 8260 - Volatile Organics

(cont.)

QC Run: 31 DEC 96-BCX

Date Analyzed: 31 DEC 96
Reporting
Limit

Analyte	Result	Units	Reporting Limit
Dichlorodifluoromethane	ND	ug/L	1.0
Chloromethane	ND	ug/L	1.0
Vinyl chloride	ND	ug/L	1.0
Bromomethane	ND	ug/L	1.0
Chloroethane	ND	ug/L	1.0
Trichlorodifluoromethane	ND	ug/L	1.0
1,1-Dichloroethene	ND	ug/L	1.0
Methylene chloride	ND	ug/L	1.0
trans-1,2-Dichloroethene	ND	ug/L	1.0
1,1-Dichloroethane	ND	ug/L	1.0
2,2-Dichloropropane	ND	ug/L	1.0
cis-1,2-Dichloroethene	ND	ug/L	1.0
Chloroform	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
Bromochloromethane	ND	ug/L	1.0
1,1,1-Trichloroethane	ND	ug/L	1.0
1,1-Dichloropropene	ND	ug/L	1.0
Carbon tetrachloride	ND	ug/L	1.0
1,2-Dichloroethane	ND	ug/L	1.0
Benzene	ND	ug/L	1.0
Trichloroethene	ND	ug/L	1.0
1,2-Dichloropropane	ND	ug/L	1.0
Bromodichloromethane	ND	ug/L	1.0
Dibromomethane	ND	ug/L	1.0
Toluene	ND	ug/L	1.0
1,1,2-Trichloroethane	ND	ug/L	1.0
1,2-Dibromoethane (EDB)	ND	ug/L	1.0
1,3-Dichloropropane	ND	ug/L	1.0
Tetrachloroethene	ND	ug/L	1.0
Dibromochloromethane	ND	ug/L	1.0
Chlorobenzene	ND	ug/L	1.0
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0
Ethylbenzene	ND	ug/L	1.0
Xylenes (total)	ND	ug/L	1.0
Styrene	ND	ug/L	1.0
Bromoform	ND	ug/L	1.0
1-Methylethylbenzene	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0
1,2,3-Trichloropropane	ND	ug/L	1.0
n-Propylbenzene	ND	ug/L	1.0
Bromobenzene	ND	ug/L	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1.0
2-Chlorotoluene	ND	ug/L	1.0
4-Chlorotoluene	ND	ug/L	1.0
tert-Butylbenzene	ND	ug/L	1.0
1,2,4-Trimethylbenzene	ND	ug/L	1.0
sec-Butylbenzene	ND	ug/L	1.0
Isopropyltoluene	ND	ug/L	1.0

ND = Not Detected



Environmental
Services

METHOD BLANK REPORT (cont.)
Volatile Organics by GC/MS
Project: 123741

Test: 8260-A Method 8260 - Volatile Organics
Matrix: AQUEOUS

(cont.)

QC Run: 31 DEC 96-BCX

Date Analyzed: 31 DEC 96
Reporting
Limit

Analyte	Result	Units	
1,3-Dichlorobenzene	ND	ug/L	1.0
1,4-Dichlorobenzene	ND	ug/L	1.0
n-Butylbenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	1.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	1.0
1,2,4-Trichlorobenzene	ND	ug/L	1.0
Hexachlorobutadiene	ND	ug/L	1.0
Naphthalene	ND	ug/L	1.0
1,2,3-Trichlorobenzene	ND	ug/L	1.0
Acetone	ND	ug/L	10
2-Butanone	ND	ug/L	10
4-Methyl-2-pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0

ND = Not Detected

APPENDIX C
GROUNDWATER PURGE AND SAMPLE FORMS

Contractor _____

Supt. on Job Shane ScrimshireSheet 1 of 2Weather ClearDate 12/17/96Temperature 75° °F Max 68° °F MinProject DACWork Hours 800 to 1710 Memos Issued _____

Photos _____

K/J/C Job No. 944016.02Special Conditions, Delays, Changes Could not find well
WCC-105.

Accidents Damage _____

Sampling, Testing See notes.

Visitors to Site _____

Work Report (Work done, Personnel/Equipment working)

800 Arrived at DAC. Demolition crews are removing buildings + other structures from north portion of property.

- Met with the foreman of demo activities + informed him that I would be on site purging + sampling wells.

Note: I cannot find WCC-105 in the parking lot + ~~the cover~~ the cover at WCC-25 has been broken but all other wells are in good shape + accessible.

915 Began measuring water levels in wells.

1130 Finished measuring wells + began setting up decor system. Also installed 200' of PVC hose onto reel.

1230 Left site to refill the propane tank for steam cleaner.

Distribution: Inspection File (orig)

Field File

By 

Job Title DAC Job No. 944016.02
Date 12/17/96 Sheet 2

- 1350 Returned to site + began setting up to purge well # WCC-55.
- 1410 Began purging WCC-55 from 85' bgs.
Total purge will be 50gal.
- 1450 Finished purge + collected sample # WCC55-17.
- 1500 Began demobbing for decon.
- 1522 Began setting up to purge + sample well # WCC-95.
- 1602 ~~Slow~~ Slowed Purge to about 200 ml/min for sample collection + collected sample # WCC95-17.
Began pulling equipment from well.
- 1620 Began Deconning equipment.
- 1640 Burner on steamcleaner will not light
Began loading equipment into truck to leave site.
- 1710 Left site.

Note: Decon system is; two new poly tanks
for soapy then fresh water interval rinse
+ a plastic wash pad for external steamclean

Groundwater Purge and Sample Form

Date: 12/17/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-55</u>
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>63.44</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>
TIME START PURGE: <u>1410</u>	PURGE DEPTH (FT) <u>85'</u>
TIME END PURGE: <u>1444</u>	
TIME SAMPLED: <u>1450</u>	
COMMENTS: <u>Slowed purge to 200 ml/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 49 \text{ gal.}$ CASING VOLUME (GAL)
				2	4	6	
	<u>89.25</u>	<u>63.44</u>	<u>25.81</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>16.51</u>

TIME	1413	1423	1428	1434	1444		
VOLUME PURGED (GAL)	<u>5 gal.</u>	<u>20 gal.</u>	<u>30 gal.</u>	<u>40 gal.</u>	<u>50 gal.</u>		
PURGE RATE (GPM)	<u>1.6</u>	<u>1.5</u>	<u>2.0</u>	<u>1.6</u>	<u>1.0</u>		
TEMPERATURE (°C)	<u>77.8</u>	<u>77.5</u>	<u>77.5</u>	<u>77.0</u>	<u>78.5</u>		
pH	<u>7.38</u>	<u>7.02</u>	<u>7.00</u>	<u>6.99</u>	<u>7.01</u>		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1869.</u>	<u>1875.</u>	<u>1827.</u>	<u>1812.</u>	<u>1779.</u>		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>		
ODOR	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>		
DEPTH OF PURGE INTAKE (FT)	<u>85'</u>	<u>85'</u>	<u>85'</u>	<u>85'</u>	<u>85'</u>		
DEPTH TO WATER DURING PURGE (FT)	<u>—</u>	<u>63.75</u>	<u>63.75</u>	<u>63.73</u>	<u>63.70</u>		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form

Date: 12/17/16

Kennedy/Jenks Consultants

PROJECT NAME: DACWELL NUMBER: WCC-55PROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1450

COMMENTS: _____

DEPTH SAMPLED (FT): 85'

SAMPLING EQUIPMENT: Redi - Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CON-TAINER TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-55-17	3	VOA	HCL	—	120mL	—	Clear	Yes	6260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 50 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drumWELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 70°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? WDcc: Project Manager: Russ Purcell

Job File: _____

Other: _____

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-95</u>
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>62.48</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Rad-Flow 2</u>
TIME START PURGE: <u>15414</u>	PURGE DEPTH (FT) <u>85'</u>
TIME END PURGE: <u>1559</u>	
TIME SAMPLED: <u>1602</u>	
COMMENTS: <u>Slowed purge to 200 mL/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 51 \text{ gal.}$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	<u>89.00</u>	<u>62.48</u>	<u>26.52</u>				<u>16.97</u>

TIME	<u>1545</u>	<u>1549</u>	<u>1551</u>	<u>1555</u>	<u>1559</u>	
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>30gal.</u>	<u>40gal.</u>	<u>52gal.</u>	
PURGE RATE (GPM)	<u>5gpm</u>	<u>5gpm</u>	<u>5gpm</u>	<u>5gpm</u>	<u>5gpm</u>	
TEMPERATURE (°C)	<u>70.8</u>	<u>70.5</u>	<u>71.5</u>	<u>71.6</u>	<u>71.2</u>	
pH	<u>7.15</u>	<u>7.27</u>	<u>7.21</u>	<u>7.20</u>	<u>7.22</u>	
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1737.</u>	<u>1260.</u>	<u>1234.</u>	<u>1224.</u>	<u>1231.</u>	
DISSOLVED OXYGEN (mg/L)						
eH(MV)Pt-AgCl ref.						
TURBIDITY/COLOR	<u>light</u> <u>gray</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	
ODOR	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	
DEPTH OF PURGE INTAKE (FT)	<u>85'</u>	<u>85'</u>	<u>85'</u>	<u>85'</u>	<u>85'</u>	
DEPTH TO WATER DURING PURGE (FT)	<u>63.81</u>	<u>63.85</u>	<u>63.88</u>	<u>63.90</u>	<u>63.91</u>	
NUMBER OF CASING VOLUMES REMOVED						
DEWATERED?						

PROJECT NAME: <u>DAC</u>					WELL NUMBER: <u>WCC-95</u>					
PROJECT NUMBER: <u>944016.02</u>					PERSONNEL: <u>Shane Scrimshire</u>					
SAMPLE DATA:										
TIME SAMPLED: <u>1602</u>					COMMENTS: _____					
DEPTH SAMPLED (FT): <u>85'</u>					_____					
SAMPLING EQUIPMENT: <u>Redi-Flow 2</u>										
SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC95-17	3	VOA	HCL	—	120 ml	—	Clear	Yes	8260	
PURGE WATER DISPOSAL NOTES:										
TOTAL DISCHARGE (GAL): <u>52 gal.</u>					COMMENTS: _____					
DISPOSAL METHOD: <u>On site drum storage</u>					_____					
DRUM DESIGNATION(S)/VOLUME PER (GAL): <u>1 drum</u>					_____					
WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):										
WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: <input checked="" type="radio"/> YES NO										
INSIDE OF WELL HEAD AND OUTER CASING DRY?: <input checked="" type="radio"/> YES NO										
WELL CASING OK?: <input checked="" type="radio"/> YES NO										
COMMENTS: _____										
GENERAL:										
WEATHER CONDITIONS: <u>Clear</u>										
TEMPERATURE (SPECIFY °C OR °F): <u>70°F</u>										
PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? <u>No</u>										
cc: Project Manager: <u>Russ Purcell</u>										
Job File: _____										
Other: _____										

Contractor _____

Supt. on Job Shane ScrivnerSheet 1 of 2Weather ClearDate 12/18/96

Temperature _____ °F Max _____ °F Min _____

Project DACWork Hours 730 to 1710 Memos Issued _____K/J/C Job No. 944016.02

Photos _____

Special Conditions, Delays, Changes _____

Accidents Damage _____

Sampling, Testing See notes

Visitors to Site _____

Work Report (Work done, Personnel/Equipment working)

750 Arrived at DAC. Set up decon pad + began steamcleaning pump hose + depth sounder.
- Thermocoupler in steamcleaner is cracked + is very difficult to heat up.

850 Began setting up to purge + sample well # WCC-1D.

922 Began purging WCC-1D from about 80' bgs.
This well is 135' deep + total purge is 134 gal.

1045 Purged + sampled well # WCC-2S.
Well 11D was lost during demo of surrounding buildings. The well is OK.

1152 Purged + sampled well # WCC-1S

1250 Purged + sampled well # WCC-12S.

Distribution: Inspection File (orig)

Field File

By 

Job Title DACJob No. 944016.02Date 12/18/96Sheet 2 of 2.

1345 Purged + sampled well # WCC-7S.

1435 Purged + sampled well # WCC-8S.

1528 Purged + sampled well # WCC-4S.

1625 Purged + sampled well # WCC-1S.

- Collected a ~~B~~ duplicate sample from WCC-1S.


Inspector

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-17</u>						
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Grimshire</u>						
STATIC WATER LEVEL (FT): <u>65.79</u>	MEASURING POINT DESCRIPTION: <u>Top of casing</u>						
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>						
TIME START PURGE: <u>922</u>	PURGE DEPTH (FT) <u>80</u>						
TIME END PURGE: <u>1001</u>							
TIME SAMPLED: <u>1006</u>							
COMMENTS: <u>Slowed purge to about 200 mL/min for sample collection.</u>							
WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)		$\times 3 = 134$ CASING VOLUME (GAL)	
				2	4		6
	<u>135.50</u>	<u>65.79</u>	<u>69.71</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>44.71</u>
TIME	<u>926</u>	<u>943</u>	<u>953</u>	<u>958</u>	<u>1001</u>		
VOLUME PURGED (GAL)	<u>10gal.</u>	<u>60gal.</u>	<u>100gal.</u>	<u>120gal.</u>	<u>135gal.</u>		
PURGE RATE (GPM)	<u>2.5</u>	<u>2.9</u>	<u>4</u>	<u>4</u>	<u>4</u>		
TEMPERATURE (°C)	<u>70.6</u>	<u>72.6</u>	<u>72.2</u>	<u>72.0</u>	<u>72.7</u>		
pH	<u>7.82</u>	<u>7.80</u>	<u>7.78</u>	<u>7.72</u>	<u>7.76</u>		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>868.</u>	<u>829.</u>	<u>807.</u>	<u>803.</u>	<u>808.</u>		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>		
ODOR	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>		
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>		
DEPTH TO WATER DURING PURGE (FT)	<u>69.28</u>	<u>70.29</u>	<u>72.30</u>	<u>72.34</u>	<u>72.35</u>		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-1DPROJECT NUMBER: 944016 .01PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1006 COMMENTS: _____DEPTH SAMPLED (FT): 80' _____SAMPLING EQUIPMENT: Redi-Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC1D-17	3	VOA	HCL	—	120ml	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 135gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 3 drums, one drum shared with WCC-1SWELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 65°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NOcc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-2S</u>
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>65.41</u>	MEASURING POINT DESCRIPTION: <u>Top of casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Perdi-Flow 2</u>
TIME START PURGE: <u>1045</u>	PURGE DEPTH (FT) <u>50'</u>
TIME END PURGE: <u>1100</u>	
TIME SAMPLED: <u>1107</u>	
COMMENTS: <u>Showed purgerate to 200 ml/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	-	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 44 \text{ gal.}$ CASING VOLUME (GAL)
							2	4	6	
							0.16	0.64	1.44	
	<u>58.74</u>		<u>65.41</u>		<u>23.33</u>					<u>14.93</u>

TIME	1048	1054	1057	1059	1100		
VOLUME PURGED (GAL)	5gal.	20gal.	30gal.	40gal.	48gal.		
PURGE RATE (GPM)	1.7	2.5	3.3	3.3	4		
TEMPERATURE (°C)	65.3	69.4	69.7	70.8	71.4		
pH	8.15	7.11	7.02	7.08	7.12		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	521.	1284.	1197.	1213.	1195.		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	light olive color	U. light olive		Clear		
ODOR	NO	sour odor			NO		
DEPTH OF PURGE INTAKE (FT)	80'	80'	80'	80'	80'		
DEPTH TO WATER DURING PURGE (FT)	66.54	67.00	67.54	67.60	67.63		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-25PROJECT NUMBER: 944016.01PERSONNEL: Shane Srinshire**SAMPLE DATA:**TIME SAMPLED: 1107

COMMENTS: _____

DEPTH SAMPLED (FT): 80'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC25-17	3	VPA	HCL	—	120ML	—	Clear	No	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 48 gal. COMMENTS: _____DISPOSAL METHOD: on site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum**WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):**WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO WELL CASING OK?: YES NO COMMENTS: Lid on Christy Box was broken during the demo.
of surrounding buildings.**GENERAL:**WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 70 °FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? Nocc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/15/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-115</u>
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>64.31</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elect. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>
TIME START PURGE: <u>1152</u>	PURGE DEPTH (FT) <u>80'</u>
TIME END PURGE: <u>1202</u>	
TIME SAMPLED: <u>1206</u>	
COMMENTS: Slowed purge rate to about 200 mL/min for sample collection.	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 48$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	<u>89.15</u>	<u>64.31</u>	<u>24.84</u>				<u>15.89</u>

TIME	<u>1153</u>	<u>1156</u>	<u>1158</u>	<u>1200</u>	<u>1202</u>	
VOLUME PURGED (GAL)	<u>5gal</u>	<u>20gal.</u>	<u>30gal.</u>	<u>40gal.</u>	<u>50gal.</u>	
PURGE RATE (GPM)	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	
TEMPERATURE (°C)	<u>69.4</u>	<u>68.2</u>	<u>68.9</u>	<u>68.9</u>	<u>66.8</u>	
pH	<u>7.30</u>	<u>7.31</u>	<u>7.28</u>	<u>7.29</u>	<u>7.29</u>	
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1367</u>	<u>1349.</u>	<u>1384.</u>	<u>1388</u>	<u>1402.</u>	
DISSOLVED OXYGEN (mg/L)						
eH(MV)Pt-AgCl ref.						
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	
ODOR	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>	
DEPTH TO WATER DURING PURGE (FT)	<u>70.33</u>	<u>71.46</u>	<u>71.70</u>	<u>71.87</u>	<u>71.99</u>	
NUMBER OF CASING VOLUMES REMOVED						
DEWATERED?						

PROJECT NAME: DACWELL NUMBER: WCC-11SPROJECT NUMBER: 944016.01PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1206 COMMENTS: _____DEPTH SAMPLED (FT): 80 _____SAMPLING EQUIPMENT: Redi-Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC11S	17	3	VOA	HCL	—	120ml	—	Clear	Yes	8260

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 50 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: Clear _____TEMPERATURE (SPECIFY °C OR °F): 71°F _____PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No _____cc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/18/16

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-125</u>
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>62.48</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>
TIME START PURGE: <u>1250</u>	PURGE DEPTH (FT) <u>80'</u>
TIME END PURGE: <u>1304</u>	
TIME SAMPLED: <u>1308</u>	
COMMENTS: <u>Slowed purge to 20ml/min for sample collection</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 52 \text{ gal}$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	90.10	62.48	27.62				17.49

TIME	1252	1257	1259	1302	1304		
VOLUME PURGED (GAL)	10gal.	25gal.	35gal.	45gal.	55gal.		
PURGE RATE (GPM)	5	3	5	5	5		
TEMPERATURE (°C)	73.2	74.7	73.9	74.2			
pH	7.73	7.40	7.36	7.35			
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	1512.	1414.	1395	1372.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear	Clear	Clear		
ODOR	No	No	No	No	No		
DEPTH OF PURGE INTAKE (FT)	80'	80'	80'	80'	80'		
DEPTH TO WATER DURING PURGE (FT)	64.86	65.11	65.13	65.15	65.15		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-125PROJECT NUMBER: 944016.01PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1308 COMMENTS: _____DEPTH SAMPLED (FT): 80' _____SAMPLING EQUIPMENT: Redi-Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC125-17	3	VOA	HCL	—	120ML	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 55 gal. COMMENTS: _____DISPOSAL METHOD: on site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 75°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? Nocc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-75</u>						
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Scrimshire</u>						
STATIC WATER LEVEL (FT): <u>63.93</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>						
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>						
TIME START PURGE: <u>1345</u>	PURGE DEPTH (FT) <u>80'</u>						
TIME END PURGE: <u>1357</u>							
TIME SAMPLED: <u>1405</u>							
COMMENTS: <u>Slowed purgerate to 200 ml/min for sample collection.</u>							
WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$Y_3 = 47.67$ CASING VOLUME (GAL)
				X	2	4	
	<u>88.80</u>	<u>63.93</u>	<u>24.87</u>		0.16	0.64	1.44
							<u>15.89</u>
TIME	<u>1347</u>	<u>1350</u>	<u>1353</u>	<u>1355</u>	<u>1357</u>		
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>30gal.</u>	<u>40gal.</u>	<u>50gal.</u>		
PURGE RATE (GPM)	<u>2.5</u>	<u>5.0</u>	<u>7.3</u>	<u>5.0</u>	<u>5.0</u>		
TEMPERATURE (°C)	<u>73.2</u>	<u>73.3</u>	<u>73.3</u>	<u>73.6</u>	<u>72.9</u>		
pH	<u>7.44</u>	<u>7.30</u>	<u>7.26</u>	<u>7.24</u>	<u>7.13</u>		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>2190.</u>	<u>1795.</u>	<u>1770.</u>	<u>1710.</u>	<u>1640.</u>		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>		
ODOR	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>		
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>		
DEPTH TO WATER DURING PURGE (FT)	<u>65.35</u>	<u>65.50</u>	<u>65.53</u>	<u>65.56</u>	<u>65.57</u>		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DAC WELL NUMBER: WCC-75PROJECT NUMBER: 944016.01 PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1405 COMMENTS: _____DEPTH SAMPLED (FT): 880' _____SAMPLING EQUIPMENT: Red. -Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-75 17	3	VOA	HCL	—	120ml	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 52 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 70°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NOcc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-85</u>
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>65.55</u>	MEASURING POINT DESCRIPTION: <u>Top of casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>
TIME START PURGE: <u>1435</u>	PURGE DEPTH (FT) <u>80'</u>
TIME END PURGE: <u>1445</u>	
TIME SAMPLED: <u>1450</u>	
COMMENTS: <u>Slowed purgerate to 200 ml/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 43 \text{ gal}$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	<u>38.05</u>	<u>65.55</u>	<u>22.50</u>				<u>14.40</u>

TIME	<u>1437</u>	<u>1440</u>	<u>1442</u>	<u>1445</u>			
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>30gal.</u>	<u>45gal.</u>			
PURGE RATE (GPM)	<u>2.5</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>			
TEMPERATURE (°C)	<u>68.1</u>	<u>69.9</u>	<u>70.8</u>	<u>69.3</u>			
pH	<u>7.26</u>	<u>7.08</u>	<u>7.06</u>	<u>6.98</u>			
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1723</u>	<u>1762</u>	<u>1786</u>	<u>1761</u>			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>			
ODOR	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>			
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>			
DEPTH TO WATER DURING PURGE (FT)	<u>67.19</u>	<u>67.25</u>	<u>67.30</u>	<u>67.32</u>			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-85PROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1450

COMMENTS: _____

DEPTH SAMPLED (FT): 80

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC85-17	3	VOA	HCL	—	120 mL	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 45 gal.

COMMENTS: _____

DISPOSAL METHOD: Redi-Flow 2

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drumWELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 70 °FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? Nocc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-45</u>						
PROJECT NUMBER: <u>944016-02</u>	PERSONNEL: <u>Shane Scrimshire</u>						
STATIC WATER LEVEL (FT): <u>64.88</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>						
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>						
TIME START PURGE: <u>1528</u>	PURGE DEPTH (FT) <u>80'</u>						
TIME END PURGE: <u>1543</u>							
TIME SAMPLED: <u>1543</u>							
COMMENTS: <u>Slowed purge rate to 200 ml/min for sample collection.</u>							
WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3.14159 =$ CASING VOLUME (GAL)
				2	4	6	
<u>89.55</u>		<u>64.88</u>	<u>24.67</u>	0.16	0.64	1.44	<u>15.78</u>
TIME	1531	1534	1536	1539	1543		
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>30gal.</u>	<u>40gal.</u>	<u>50gal.</u>		
PURGE RATE (GPM)	<u>1.6</u>	<u>5.0</u>	<u>5.0</u>	<u>3.3</u>	<u>2.5</u>		
TEMPERATURE (°C)	<u>69.5</u>	<u>71.0</u>	<u>71.6</u>	<u>72.3</u>	<u>70.4</u>		
pH	<u>7.49</u>	<u>7.29</u>	<u>7.17</u>	<u>7.15</u>	<u>7.11</u>		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1802</u>	<u>1775</u>	<u>1669</u>	<u>1605</u>	<u>1610</u>		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>		
ODOR	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>		
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>		
DEPTH TO WATER DURING PURGE (FT)	<u>65.87</u>	<u>66.05</u>	<u>66.06</u>	<u>66.18</u>	<u>66.18</u>		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-4SPROJECT NUMBER: 944016.02PERSONNEL: Shane Scrimshire**SAMPLE DATA:**TIME SAMPLED: 1548

COMMENTS: _____

DEPTH SAMPLED (FT): 80

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ML OR L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC4S-17	3	VOA	HCL	—	120ml	—	clear	Yes	5260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 50 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum**WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):**WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 71°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NOcc: Project Manager: Russ Purcell
Job File: _____
Other: _____

Groundwater Purge and Sample Form

Date: 12/18/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-1 S</u>
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>65.73</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>12edi - Flow 2</u>
TIME START PURGE: <u>1625</u>	PURGE DEPTH (FT) <u>82'</u>
TIME END PURGE: <u>1644</u>	
TIME SAMPLED: <u>1650</u>	
COMMENTS: Slowed purge to 200 ml/min for sample collection. Collected duplicate sample # DW-121896 from this well.	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = \text{SS. Sigal.}$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	<u>33.40</u>	<u>55.73</u>	<u>17.67</u>				<u>2.82</u>

TIME	1630	1634	1638	1641	1644		
VOLUME PURGED (GAL)	1gal.	4gal.	7gal.	8.5gal.	10gal.		
PURGE RATE (GPM)	.2	1.0	.75	.83	.5		
TEMPERATURE (°C)	70.3	66.6	67.2	68.4	71.4		
pH	7.83	7.48	7.27	7.21	7.27		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	514.	1192.	1728.	2,080.	2,060.		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	light olive	olive,				
ODOR	NO	NO	NO	NO	NO		
DEPTH OF PURGE INTAKE (FT)	82'	82'	82'	82'	82'		
DEPTH TO WATER DURING PURGE (FT)	N.A.	N.A.	N.A.	N.A.	N.A.		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-1SPROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1650

COMMENTS: _____

DEPTH SAMPLED (FT): 82'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CON-TAINER-TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-1S-17	3	VOA	HCL	—	120mL	—	Olive	YES	8260	
DW-121896	"	"	"	—	"	—	"	"	"	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 10 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): Shared a drum with WCC-1D.WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 68°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NOcc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Contractor _____

Supt. on Job Shane ScrivnshireSheet 1 of 2Weather ClearDate 12/19/96Temperature 50 °F Max 60 °F Min _____Project DACWork Hours 730 to 1335 Memos Issued _____K/J/C Job No. 944016.01

Photos _____

Special Conditions, Delays, Changes _____

Accidents Damage _____

Sampling, Testing see notes

Visitors to Site _____

Work Report (Work done, Personnel/Equipment working)

750 ~~800~~ Arrived on site. Filled decon wash barrels, filled steamcleaner water tank + deconed equipment.

800 Began purge well # WCC-3D. This is the deepest well on site with a total purge of 138 gal.
This well also recovers slowly (approx 1-2 gal. min.).
936 Collected sample # WCC3D-17.

1018 Began purge on well # WCC-3S. This well has a strong odor.

1036 Collected sample # WCC3S-17.

1107 Began purge on WCC-6S. This well also has a very strong odor.

1125 Collected sample # WCC6S-17 + Duplicate sample DW-121996.

Distribution: Inspection File (orig)

Field File

By 

Job Title DACJob No. 944016.02Date 12/19/96Sheet 2 of 2

- 1222 Began purging well # DAC-PI. Purged from 88' because of low recovery rate.
- 1234 Pump overheated + stopped. Allowed pump to cool before resuming purge.
- 1240 Resumed purge.
- 1250 Slowed purge rate to 200 ml/min + collected sample # DACPI-17.

After pulling equipment from well I decontaminated for the last time + collected a rinsate (blank) sample by purging clean water (lab prepared) over the clean pump + collecting rinsate in 3- VOA's.

1310 Collected EB-121896.

1335 Demobilized decon system + left site.

- Generated 1 rinsate drum in addition to purge drums.


Inspector

Contractor _____

Supt. on Job Shane ScrimshireSheet 1 of 2Weather ClearDate 12/19/96Temperature 50 °F Max 60 °F MinProject DACWork Hours 730 to 1335 Memos Issued _____K/J/C Job No. 944016.01

Photos _____

Special Conditions, Delays, Changes _____

Accidents Damage _____

Sampling, Testing see notes

Visitors to Site _____

Work Report (Work done, Personnel/Equipment working)

750 ~~800~~ Arrived on site. Filled decon wash barrels, filled steamcleaner water tank + deconed equipment.

800 Began purge well # WCC-3D. This is the deepest well on site with a total purge of 138 gal.
This well also recovers slowly (approx 1-2 gal. min.)

936 Collected sample # WCC3D-17.

1018 Began purge on well # WCC-3S. This well has a strong odor.

1036 Collected sample # WCC3S-17.

1107 Began purge on WCC-6S. This well also has a very strong odor.

1125 Collected sample # WCC6S-17 + Duplicate sample DW-121996.

Distribution: Inspection File (orig)

Field File

By 

Job Title DAC Job No. 944016.02
Date 12/19/96 Sheet 2 of 2

- 1222 Began purging well # DAC-PI. Purged from 88' because of low recovery rate.
- 1234 Pump overheated + stopped. Allowed pump to cool before resuming purge.
- 1240 Resumed purge.
- 1250 Slowed purge rate to 200 ml/min + collected sample # DACPI-17.

After pulling equipment from well I deconed for the last time + collected a rinsate (blank) sample by purging clean water (lab prepared) over the clean pump + collecting rinsate in 3- VOA's

- 1310 Collected EB-121896, ¹⁹
- 1335 Demobilized decon system + left site.
- Generated 1 rinsate drum in addition to purge drums.


Inspector

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-3D</u>
PROJECT NUMBER: <u>944016.01</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>66.39</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Reci. - Flow 2</u>
TIME START PURGE: <u>830</u>	PURGE DEPTH (FT) <u>110'</u>
TIME END PURGE: <u>931</u>	
TIME SAMPLED: <u>936</u>	
COMMENTS: <u>Slowed purge rate to 200 ml/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 138$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	138.70	66.39	72.31				46.27

TIME	835	858	913	920	931		
VOLUME PURGED (GAL)	10 gal.	60	100	120	150		
PURGE RATE (GPM)	2.0	2.0	2.6	2.8	2.7		
TEMPERATURE (°C)	60.0	64.9	66.4	67.2	64.5		
pH	7.60	7.76	7.70	7.71	7.66		
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	704.	689.	698.	714.	690.		
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear	Clear	Clear		
ODOR	NO	NO	NO	NO	NO		
DEPTH OF PURGE INTAKE (FT)	110'	110'	110'	110'	110'		
DEPTH TO WATER DURING PURGE (FT)	75.90	86.00	87.98	91.60	93.22		
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-3DPROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 936

COMMENTS: _____

DEPTH SAMPLED (FT): 110

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CON-TAINER-TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC3D-17	3	VOA	HCL	—	120 ml	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 150

COMMENTS: _____

DISPOSAL METHOD: On site drum storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 3 drumsWELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 68° FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NOcc: Project Manager: Russ Purcell

Job File: _____

Other: _____

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>DAC - P1</u>						
PROJECT NUMBER: <u>94406.02</u>	PERSONNEL: <u>Shane Scrimshire</u>						
STATIC WATER LEVEL (FT): <u>67.11</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>						
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi - Flow 2</u>						
TIME START PURGE: <u>1222</u>	PURGE DEPTH (FT) <u>88'</u>						
TIME END PURGE: <u>1245</u>							
TIME SAMPLED: <u>1250</u>							
COMMENTS: <u>1234 - Pump over-treated + stopped.</u> <u>1240 - Restarted pump</u> <u>1310 - Collected Equip. Blank # EB-121996.</u>							
WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 43.5$ CASING VOLUME (GAL)
				2	4	6	
	<u>89.80</u>	<u>67.11</u>	<u>22.69</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>14.52</u>
TIME	<u>1226</u>	<u>1232</u>	<u>1241</u>	<u>1245</u>			
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>35gal.</u>	<u>44gal.</u>			
PURGE RATE (GPM)	<u>1.2</u>	<u>2.5</u>	<u>1.6</u>	<u>2.25</u>			
TEMPERATURE (°C)	<u>71.1</u>	<u>72.3</u>	<u>72.2</u>	<u>72.1</u>			
pH	<u>7.10</u>	<u>7.19</u>	<u>7.09</u>	<u>7.06</u>			
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>2,070.</u>	<u>2070.</u>	<u>2,200.</u>	<u>2,260.</u>			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>U.V. light gray</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>			
ODOR	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>			
DEPTH OF PURGE INTAKE (FT)	<u>88'</u>	<u>88'</u>	<u>88'</u>	<u>88'</u>			
DEPTH TO WATER DURING PURGE (FT)	<u>69.40</u>	<u>69.80</u>	<u>69.20</u>	<u>73.15</u>			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form

Date: 12/19/96

Kennedy/Jenks Consultants

PROJECT NAME: DACWELL NUMBER: DAC-PIPROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1250COMMENTS: EB-121996 collected @ 1310DEPTH SAMPLED (FT): 88'SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CON-TAINER-TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
DACPI-17	3	VOA	HCL	—	120ml	—	Clear	Yes	8260	
EB-121996	3	"	"	—	"	—	"	"	"	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 44 COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: Clear _____TEMPERATURE (SPECIFY °C OR °F): 72°F _____PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO _____cc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/19/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-65</u>						
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>						
STATIC WATER LEVEL (FT): <u>66.30</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>						
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>						
TIME START PURGE: <u>1107</u>	PURGE DEPTH (FT) <u>80</u>						
TIME END PURGE: <u>1120</u>							
TIME SAMPLED: <u>1125</u>							
COMMENTS: <u>Slowed purge to 200 ml/min for sample collection.</u>							
<u>Collected Dup. From this well # DW - 121996</u>							
WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			x 3=42 CASING VOLUME (GAL)
				2	4	6	
	<u>89.05</u>	<u>66.30</u>	<u>22.75</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>13.96</u>
TIME	1109	1111	1116	1120			
VOLUME PURGED (GAL)	<u>10 gal.</u>	<u>20 gal.</u>	<u>30 gal.</u>	<u>45 gal.</u>			
PURGE RATE (GPM)	<u>3.3</u>	<u>3.3</u>	<u>2.0</u>	<u>3.75</u>			
TEMPERATURE (°C)	<u>72.5</u>	<u>72.9</u>	<u>72.6</u>	<u>71.9</u>			
pH	<u>7.00</u>	<u>6.65</u>	<u>7.00</u>	<u>6.98</u>			
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>1513.</u>	<u>1506.</u>	<u>1512.</u>	<u>1492.</u>			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>			
ODOR	<u>sour odor</u>	<u>sour odor</u>	<u>sour odor</u>	<u>sour odor</u>			
DEPTH OF PURGE INTAKE (FT)	<u>80</u>	<u>80</u>	<u>80</u>	<u>80</u>			
DEPTH TO WATER DURING PURGE (FT)	<u>68.05</u>	<u>68.08</u>	<u>68.40</u>	<u>68.48</u>			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-65PROJECT NUMBER: 944016.02PERSONNEL: Shane Scrimshire**SAMPLE DATA:**TIME SAMPLED: 1125 COMMENTS: _____DEPTH SAMPLED (FT): 80' _____SAMPLING EQUIPMENT: Redi - Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC65-17	3	VOA	HCL	—	120mL	—	Clear	Yes	SO60	
DW-121996	"	"	"	—	"	—	"	"	"	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 45 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____**WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):**WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 71°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? Nocc: Project Manager: Russ Purcell

Job File: _____

Other: _____

Groundwater Purge and Sample Form

Date: 12/19/96

Kennedy/Jenks Consultants

PROJECT NAME: <u>DAC</u>	WELL NUMBER: <u>WCC-39</u>
PROJECT NUMBER: <u>944016.02</u>	PERSONNEL: <u>Shane Scrimshire</u>
STATIC WATER LEVEL (FT): <u>66.30</u>	MEASURING POINT DESCRIPTION: <u>Top of Casing</u>
WATER LEVEL MEASUREMENT METHOD: <u>Elec. Probe</u>	PURGE METHOD: <u>Redi-Flow 2</u>
TIME START PURGE: <u>1018</u>	PURGE DEPTH (FT) <u>80'</u>
TIME END PURGE: <u>1031</u>	
TIME SAMPLED: <u>1036</u>	
COMMENTS: <u>Slowed purge to 200ml/min for sample collection.</u>	

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	WATER COLUMN (FT)	MULTIPLIER FOR CASING DIAMETER (IN)			$\times 3 = 42$ CASING VOLUME (GAL)
				2	4	6	
				0.16	0.64	1.44	
	<u>88.07</u>	<u>66.30</u>	<u>21.77</u>				<u>13.91</u>

TIME	1021	1025	1028	1031			
VOLUME PURGED (GAL)	<u>5gal.</u>	<u>20gal.</u>	<u>30gal.</u>	<u>45gal.</u>			
PURGE RATE (GPM)	<u>1.6</u>	<u>3.75</u>	<u>3.3</u>	<u>5.0</u>			
TEMPERATURE (°C)	<u>71.2</u>	<u>72.0</u>	<u>72.7</u>	<u>73.4</u>			
pH	<u>6.48</u>	<u>6.62</u>	<u>6.64</u>	<u>6.67</u>			
SPECIFIC CONDUCTIVITY (micromhos) (uncorrected) cm	<u>3940.</u>	<u>2670.</u>	<u>2470.</u>	<u>2260.</u>			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	<u>Clear w/ suspended dark particles</u>			<u>→</u>			
ODOR	<u>sour odor</u>	<u>sour odor</u>	<u>sour odor</u>	<u>sour odor</u>			
DEPTH OF PURGE INTAKE (FT)	<u>80'</u>	<u>80'</u>	<u>80'</u>	<u>80'</u>			
DEPTH TO WATER DURING PURGE (FT)	<u>67.25</u>	<u>67.27</u>	<u>67.44</u>	<u>67.50</u>			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

PROJECT NAME: DACWELL NUMBER: WCC-35PROJECT NUMBER: 944016.02PERSONNEL: Shane ScrimshireSAMPLE DATA:TIME SAMPLED: 1056 COMMENTS: _____DEPTH SAMPLED (FT): 80 _____SAMPLING EQUIPMENT: Red. -Flow 2 _____

SAMPLE NO.	NO. OF CONTAINERS	CON-TAINER-TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCCSS-17	3	VOA	HCL	—	120ml	—	Clear	Yes	8260	

PURGE WATER DISPOSAL NOTES:TOTAL DISCHARGE (GAL): 45 gal. COMMENTS: _____DISPOSAL METHOD: On site drum storage _____DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum _____WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NOINSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NOWELL CASING OK?: YES NO

COMMENTS: _____

GENERAL:WEATHER CONDITIONS: ClearTEMPERATURE (SPECIFY °C OR °F): 70°FPROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? Nocc: Project Manager: Russ Purcell

Job File: _____

Other: _____

APPENDIX D
CHAIN-OF-CUSTODY RECORDS

Chain of Custody Record



Client Kennedy Tanks	Project Manager Russ Purcell	Date 12/17/96	Chain Of Custody Number 61762																														
Address 2151 Mickelson Dr.	Telephone Number (Area Code)/Fax Number (714) 261-1572	Lab Number 1	Page 1 of 1																														
City Irvine	Site Contact Carrier/Waybill Number D&C	Analysis (Attach list if more space is needed)																															
State CA.	Carrier/Waybill Number 92715	Special Instructions/ Conditions of Receipt:																															
<p>8260</p> <p>X X</p>																																	
<p>Containers & Preservatives</p> <table border="1"> <thead> <tr> <th></th> <th>Matrix</th> <th></th> </tr> </thead> <tbody> <tr> <td>Acetone</td> <td>Soil</td> <td></td> </tr> <tr> <td>Sed.</td> <td>Soil</td> <td></td> </tr> <tr> <td>Unapres.</td> <td>Soil</td> <td></td> </tr> <tr> <td>H2SO4</td> <td>Soil</td> <td></td> </tr> <tr> <td>HNO3</td> <td>Soil</td> <td></td> </tr> <tr> <td>HCl</td> <td>Soil</td> <td></td> </tr> <tr> <td>NaOH</td> <td>Soil</td> <td></td> </tr> <tr> <td>ZnAC</td> <td>Soil</td> <td></td> </tr> <tr> <td>NaOH</td> <td>Soil</td> <td></td> </tr> </tbody> </table>					Matrix		Acetone	Soil		Sed.	Soil		Unapres.	Soil		H2SO4	Soil		HNO3	Soil		HCl	Soil		NaOH	Soil		ZnAC	Soil		NaOH	Soil	
	Matrix																																
Acetone	Soil																																
Sed.	Soil																																
Unapres.	Soil																																
H2SO4	Soil																																
HNO3	Soil																																
HCl	Soil																																
NaOH	Soil																																
ZnAC	Soil																																
NaOH	Soil																																
<p>Sample I.D. No. and Description</p> <p>(Containers for each sample may be combined on one line)</p> <table border="1"> <thead> <tr> <th></th> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>WCC55-17</td> <td>12/17/96</td> <td>1450</td> </tr> <tr> <td>WCC95-17</td> <td>"</td> <td>1602</td> </tr> <tr> <td colspan="3">Included with freeze tank samples</td> </tr> </tbody> </table>					Date	Time	WCC55-17	12/17/96	1450	WCC95-17	"	1602	Included with freeze tank samples																				
	Date	Time																															
WCC55-17	12/17/96	1450																															
WCC95-17	"	1602																															
Included with freeze tank samples																																	
<p>Possible Hazard Identification</p> <p><input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)</p>																																	
<p>Turn Around Time Required</p> <p><input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input checked="" type="checkbox"/> 10 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other</p>																																	
<p>1. Relinquished By [Signature]</p>																																	
<p>2. Received By [Signature]</p>																																	
<p>3. Received By [Signature]</p>																																	
<p>Comments</p>																																	

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record



QUA-4124-1

Client Address		Project Manager Russ Purcell		Date 12/18/96	Chain Of Custody Number 61761						
City 1051 Mickelson Dr.		Telephone Number (Area Code)/Fax Number (714) 261-1577		Lab Number	Page 1 of 1						
Project Name IRVINE		Site Contact State CA. Zip Code 92715		Lab Contact							
Carrier/Waybill Number DAC		Contract/Purchase Order/Quote No.		Analysis (Attach list if more space is needed)							
				Special Instructions/ Conditions of Receipt							
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Matrix	Containers & Preservatives								
WCC10-17	12/18/96	aqueous	X								
WCC25-17	1107	sed.									
WCC115-17	1206	soil									
WCC125-17	1308	uppers.									
WCC75-17	1405	H2SO4									
WCC85-17	1450	NaOH									
WCC45-17	1548	ZnAc2									
WCC15-17	1650	NaOH									
DW-121896											
TCS-121896											
		Sample Disposal		(A fee may be assessed if samples are retained longer than 3 months)							
		<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	QC Requirements (Specify)	Months
		<input checked="" type="checkbox"/> Turn Around Time Required	<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other			
1. Relinquished By <i>[Signature]</i>		Date 12/18/96		Time 1925		1. Received By <i>[Signature]</i>		Date 12/18/96		Time 1925	
2. Relinquished By <i>[Signature]</i>		Date 12/18/96		Time 1925		2. Received By <i>[Signature]</i>		Date 12/18/96		Time 1925	
3. Relinquished By <i>[Signature]</i>		Date 12/18/96		Time 1925		3. Received By <i>[Signature]</i>		Date 12/18/96		Time 1925	
Comments											

DISTRIBUTION: **WHITE** - Stays with the Sample; **CANARY** - Returned to Client with Report; **PINK** - Field Copy

